

Panasonic®

Operating Instructions High Definition Plasma Television

Model No. **TH-50PV30**



Pedestal stand shown above is optional extra.



Please read these instruction before operating your set and retain them for future reference.

English

TQBC0720

Welcome

Dear Panasonic Customer,

We hope that you have many years of enjoyment from your new TV. The **Quick Start Guide** section at the beginning of this instruction book will allow you to use the TV as quickly as possible. We recommend that you then read the complete instruction book, and keep it to refer to as you explore the range of advanced features that this Plasma TV offers.

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Important Safety Notice

WARNING

- 1) To prevent damage which may result in fire or shock hazard, do not expose this appliance to rain or moisture.
Do not place containers with water (flower vase, cups, cosmetics, etc.) above the set. (including on shelves above, etc.)
- 2) To prevent electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.
- 3) Do not remove the earthing pin on the power plug. This apparatus is equipped with a three pin earthing-type power plug. This plug will only fit an earthing-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician.
Do not defeat the purpose of the earthing plug.

CAUTION

- 1) This appliance is intended for use in environments which are relatively free of electromagnetic fields.
Using this appliance near sources of strong electromagnetic fields or where electrical noise may overlap with the input signals could cause the picture and sound to wobble or cause interference such as noise to appear.
To avoid the possibility of harm to this appliance, keep it away from sources of strong electromagnetic fields.
- 2) If a static electricity discharge occurs inside the front cover, the screen may momentarily flicker. This is not a malfunction.
The screen will return to normality in a short while.

To prevent electric shock, ensure the grounding pin on the AC cord power plug is securely connected.

Trademark Credits

- VGA is a trademark of International Business Machines Corporation.
- Macintosh is a registered trademark of Apple Computer, USA.
- S-VGA is a registered trademark of the Video Electronics Standard Association.
Even if no special notation has been made of company or product trademarks, these trademarks have been fully respected.
- SD Logo is a trademark.

CAUTION:

Symptoms	Check
After-images appear 	Do not allow a still picture to be displayed for an extended period, as this can cause a permanent after-image to remain on the Plasma TV. Examples of still pictures include logos, video games, computer images, teletext and images displayed in 4:3 mode. Without signals and operations for 2 minutes, the level of the contrast decreases automatically to prevent image retention. Note: The permanent after-image on the Plasma TV resulting from fixed image use is not an operating defect and as such is not covered by the Warranty. This product is not designed to display fixed images for extended periods of time.

Safety Precautions

WARNING

■ Setup

This Plasma TV is for use only with the following optional accessories. Use with any other type of optional accessories may cause instability which could result in the possibility of injury.

(All of the following accessories are manufactured by Matsushita Electric Industrial Co., Ltd.)

- Pedestal TY-ST50PX20
- Display stand TY-DP4201W, TY-S50PX20W
- Wall-hanging bracket (vertical) TY-WK42PV3W
- Wall-hanging bracket (angle) TY-WK42PR2W

Always be sure to ask a qualified technician to carry out set-up.

Do not place the Plasma TV on sloped or unstable surfaces.

- The Plasma TV may fall off or tip over.

Do not place any objects on top of the Plasma TV.

- If water is spilt onto the Plasma TV or foreign objects get inside it, a short-circuit may occur which could result in fire or electric shock. If any foreign objects get inside the Plasma TV, please consult your local Panasonic dealer.

If using the pedestal (optional accessory), leave a space of at least 10 cm at the top, left and right, at least 6 cm at the bottom, and at least 7 cm at the rear. If using some other setting-up method, leave a space of at least 10 cm at the top, bottom, left and right, and at least 1.9 cm at the rear.

Avoid installing this product near electronic equipment that is easy to receive electromagnetic waves.

- It will cause interference in image, sound, etc. In particular, keep video equipment away from this product.

■ When using the Plasma TV

The Plasma TV is designed to operate on 220 - 240 V AC, 50/60 Hz.

Do not cover the ventilation holes.

- Doing so may cause the Plasma TV to overheat, which can cause fire or damage to the Plasma TV.

Do not stick any foreign objects into the Plasma TV.

- Do not insert any metal or flammable objects into the ventilations holes or drop them onto the Plasma TV, as doing so can cause fire or electric shock.

Do not remove the cover or modify it in any way.

- High voltages which can cause severe electric shocks are present inside the Plasma TV. For any inspection, adjustment and repair work, please contact your local Panasonic dealer.

Securely insert the power cord plug as far as it will go.

- If the plug is not fully inserted, heat may be generated which could cause fire. If the plug is damaged or the wall socket plate is loose, they shall not be used.

Do not handle the power cord plug with wet hands.

- Doing so may cause electric shocks.

Do not do anything that may damage the power cable. When disconnecting the power cable, pull on the plug body, not the cable.

- Do not damage the cable, make any modifications to it, place heavy objects on top of it, heat it, place it near any hot objects, twist it, bend it excessively or pull it. To do so may cause fire and electric shock. If the power cable is damaged, have it repaired at your local Panasonic dealer.

If the Plasma TV is not going to be used for any prolonged length of time, unplug the power cord plug from the wall outlet.

Safety Precautions

■ If problems occur during use

If a problem occurs (such as no picture or no sound), or if smoke or an abnormal odour starts to come out from the Plasma TV, immediately unplug the power cord plug from the wall outlet.

- If you continue to use the Plasma TV in this condition, fire or electric shock could result. After checking that the smoke has stopped, contact your local Panasonic dealer so that the necessary repairs can be made. Repairing the Plasma TV yourself is extremely dangerous, and should never be attempted.

If water or foreign objects get inside the Plasma TV, if the Plasma TV is dropped, or if the cabinet becomes damages, disconnect the power cord plug immediately.

- A short circuit may occur, which could cause fire. Contact your local Panasonic dealer for any repairs that need to be made.



CAUTION

■ When using the Plasma TV

Do not bring your hands, face or objects close to the ventilation holes of the Plasma TV.

- Heated air comes out from the ventilation holes at the top of Plasma TV will be hot. Do not bring your hands or face, or objects which cannot withstand heat, close to this port, otherwise burns or deformation could result.

Be sure to disconnect all cables before moving the Plasma TV.

- If the Plasma TV is moved while some of the cables are still connected, the cables may become damaged, and fire or electric shock could result.

Disconnect the power cord plug from the wall socket as a safety precaution before carrying out any cleaning.

- Electric shocks can result if this is not done.

Clean the power cable regularly to prevent it becoming dusty.

- If dust built up on the power cord plug, the resultant humidity can damage the insulation, which could result in fire. Pull the power cord plug out from the wall outlet and wipe the mains lead with a dry cloth.

This Plasma TV radiates infrared rays, therefore it may affect other infrared communication equipment.

Install your infrared sensor in a place away from direct or reflected light from your Plasma TV.

Maintenance

The front of the display panel has been specially treated. Wipe the panel surface gently using only a cleaning cloth or a soft, lint-free cloth.

- If the surface is particularly dirty, wipe with a soft, lint-free cloth which has been soaked in pure water or water to which a small amount of neutral detergent has been added, and then wipe it evenly with a dry cloth of the same type until the surface is dry.
- Do not scratch or hit the surface of the panel with fingernails or other hard objects, otherwise the surface may become damaged. Furthermore, avoid contact with volatile substances such as insect sprays, solvents and thinner, otherwise the quality of the surface may be adversely affected.

If the cabinet becomes dirty, wipe it with a soft, dry cloth.

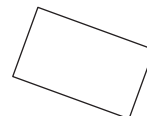
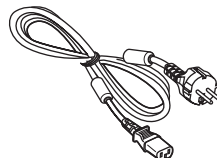
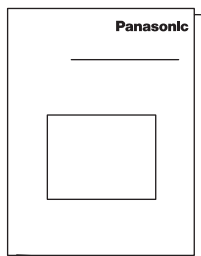
- If the cabinet is particularly dirty, soak the cloth in water to which a small amount of neutral detergent has been added and then wring the cloth dry. Use this cloth to wipe the cabinet, and then wipe it dry with a dry cloth.
- Do not allow any detergent to come into direct contact with the surface of the Plasma TV.
If water droplets get inside the unit, operating problems may result.
- Avoid contact with volatile substances such as insect sprays, solvents and thinner, otherwise the quality of the cabinet surface may be adversely affected or the coating may peel off. Furthermore, do not leave it for long periods in contact with articles made from rubber or PVC.

Accessories

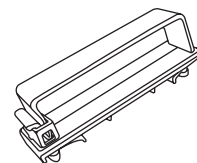
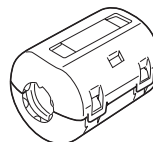
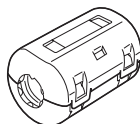
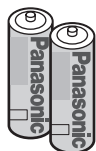
Check that you have the accessories and items shown



- | | | | |
|--|--|-------------------------------------|---------------------------------------|
| ☐ Operating Instruction book (TQBC0720) | ☐ Remote Control Transmitter (EUR7635020) | ☐ Mains Lead | ☐ TV Guarantee |
|--|--|-------------------------------------|---------------------------------------|



- | | | | |
|---|--|--|--------------------------------------|
| ☐ Batteries for the Remote Control Transmitter (2 × R6 (UM3) size) | ☐ Ferrite core (Small size) × 5 | ☐ Ferrite core (Large size) × 2 | ☐ Clamper × 2 |
|---|--|--|--------------------------------------|



Installing the ferrite core (Small size)

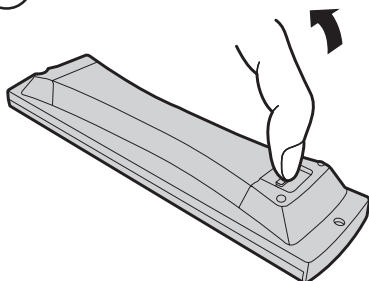
- Pull back the tabs. (in two places)
-
- Press the cable through and close.

Installing the ferrite core (Large size)

- Pull back the tabs. (in two places)
-
- Press the cable through and close.

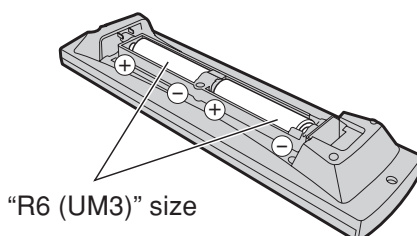
Fitting remote control batteries

①



Pull and hold the hook, then open the battery cover.

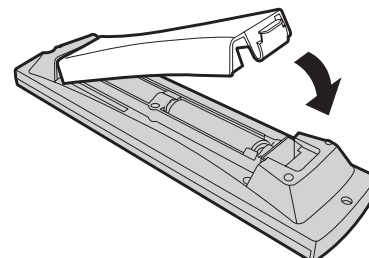
②



"R6 (UM3)" size

Insert batteries - note correct polarity (+ and -).

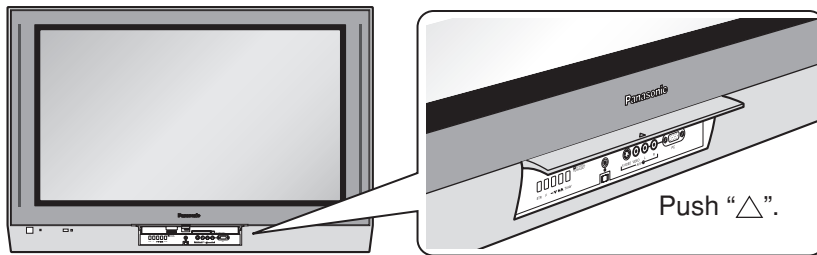
③



Replace the cover.

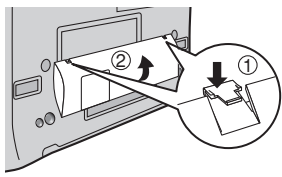
- Make sure that the batteries are fitted the correct way round.
- Do not mix old batteries with new batteries. Remove old, exhausted batteries immediately.
- Do not mix different battery types, i.e. Alkaline and Manganese or use rechargeable (Ni - Cad) batteries.

How to open the front cover



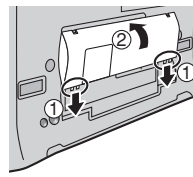
Terminal cover open and close

Open

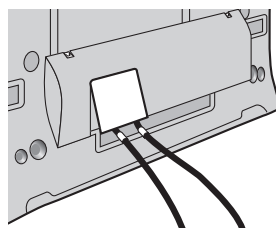
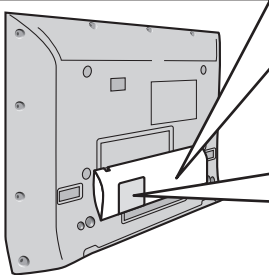


1. Push down hooks and pull the cover slightly towards yourself to disengage the claws (at 4 points).
2. Slowly pull out in the downward direction.

Close



1. Insert the claws (at 4 points) at the bottom end.
2. Push until it clicks.

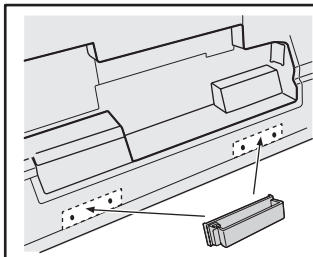


When connecting the Scart cable to the TV's Scart terminals, connect through this window. (This window cannot close completely when connecting the Scart cable.)

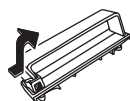
Other cables should be connected before closing the terminal cover.

Fastening method

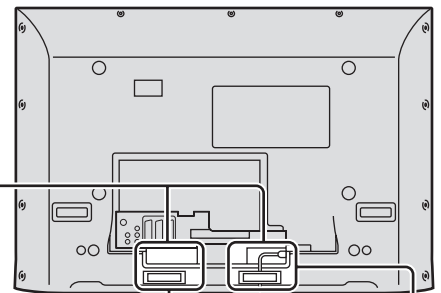
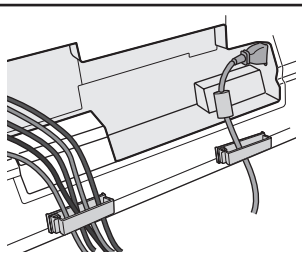
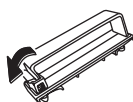
Clamper



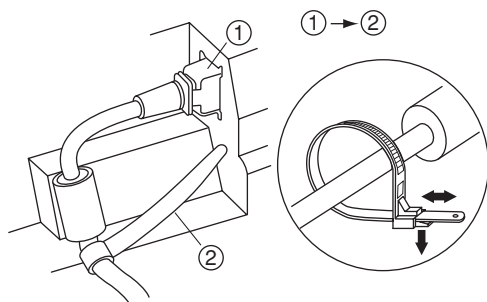
Open



Close



Fastening of Mains Lead and other cables



Fastening method of Mains Lead

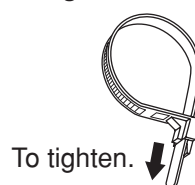
1. Insert the power plug into the main body.
2. Fasten with the mains lead fastening band.

Fastening method of other cables

Attach the clamper on the installation hole, and fasten them. Bundle the cable with the cable fastening clamper.

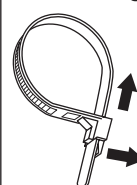
Fastening band

Fastening



To tighten.

Loosening

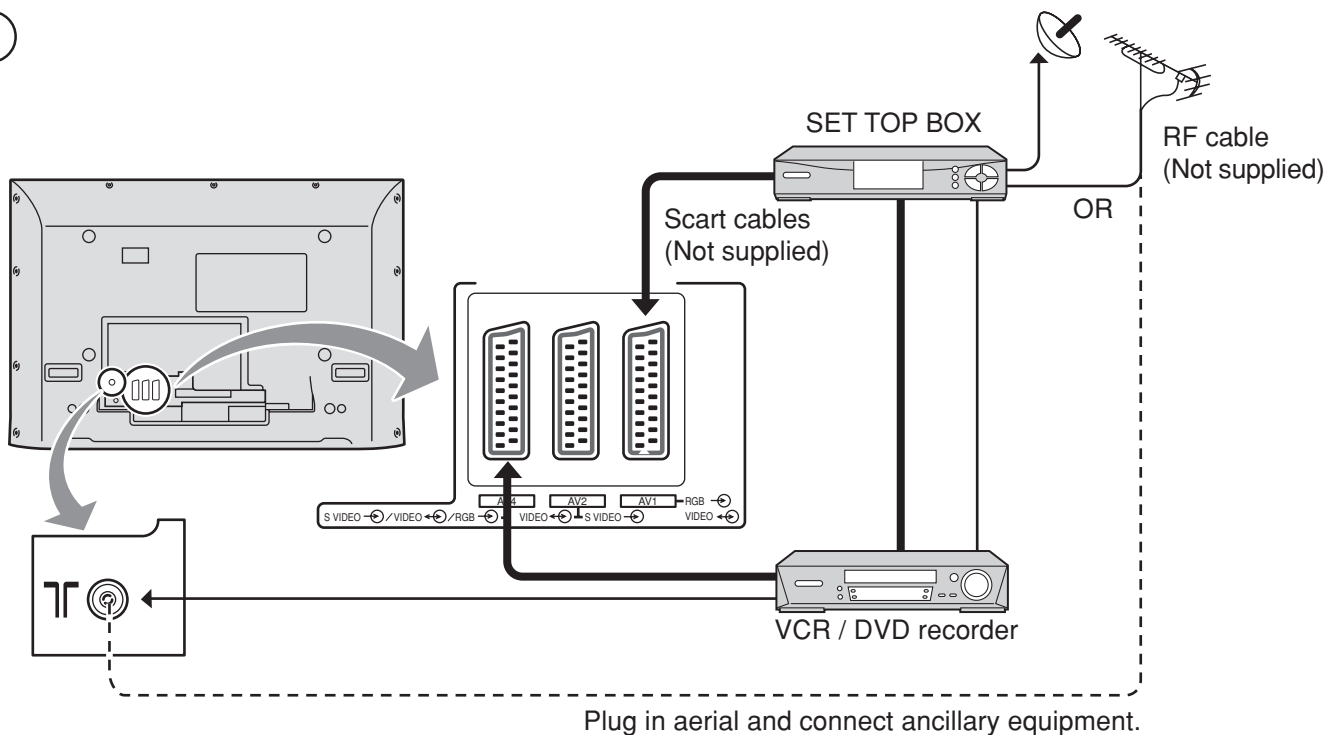


Pull off.

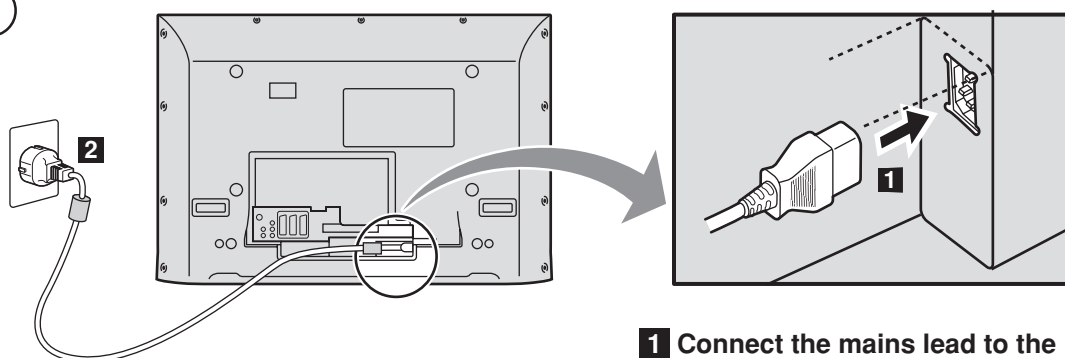
Keep the knob pressed.

Quick Start Guide

①



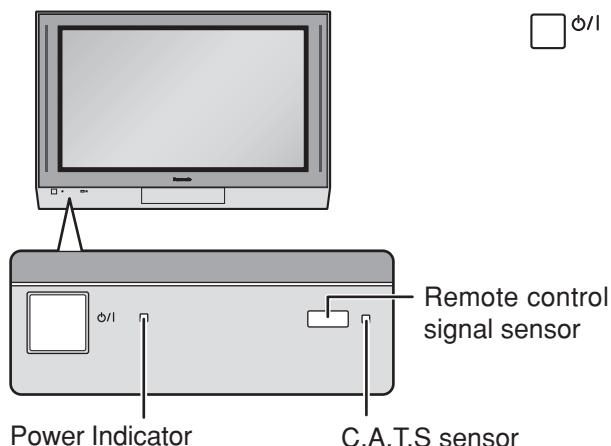
②



1 Connect the mains lead to the Plasma TV.

2 Connect the mains plug to the wall socket.

③



☐ Power/I

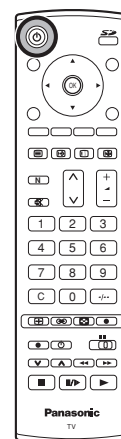
Press the  switch on the TV set to turn the set on.

To switch the TV set to Standby mode, press the  button on the remote control.

The TV set can be switched on by pressing the  button again if it was switched to Standby mode.

Note:

This TV will still consume some power as long as the mains plug is still inserted into the wall socket.



Power Indicator

C.A.T.S sensor

Plasma C.A.T.S (Contrast Automatic Tracking System)

Plasma C.A.T.S automatically senses the ambient light conditions and adjusts the brightness and gradation accordingly, to optimise contrast. (Effective when Viewing mode is set to Auto.)

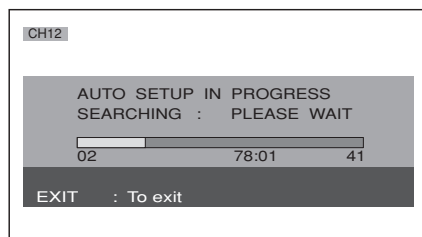
LED Indicator

Standby : Red

On : No Light

Quick Start Guide

4



Select your country.

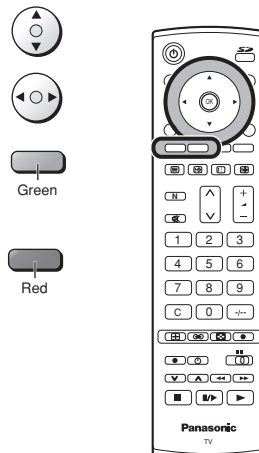
For Belgium, Switzerland and E.Eu, select the desired language.

If you wish to perform manual tuning, press the **Green** button. See page 19.

Press the **Red** button to start **Auto Setup**.

Auto setup will begin, your stations will be located and stored.

If a compatible recording device is connected to the correct Scart terminal, programme data will be downloaded to the device via Q-Link. See page 20.



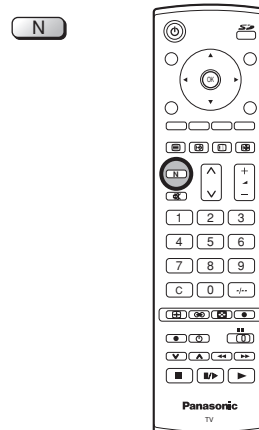
5

Once **Auto setup** is complete, if you are installing a new Q-Link compatible recording device, you can now switch it **On**. Downloaded tuning data will match the television's. Not all devices support this download of programme information, some may require to be started manually. See the device's instruction book for details.

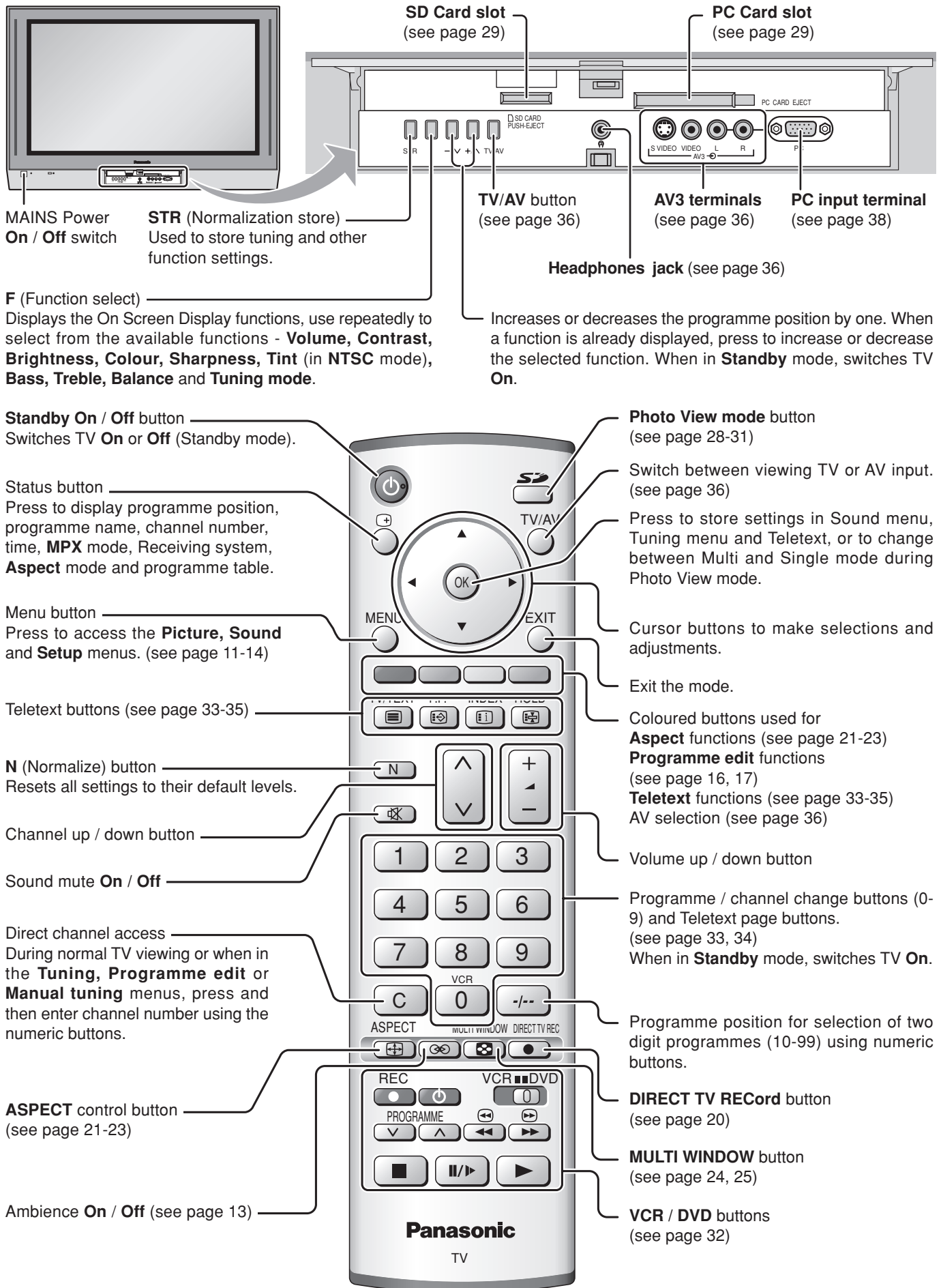
- If the recording device has not accepted download data from the TV, you may need to select the download option from the device's menu.
- If **Q-Link** is not operating correctly, check it is connected to the TV's correct Scart terminal, the Scart cable is a "full function" type, and the device is compatible with **Q-Link**, NEXTVIEWLINK or similar technologies. Ask your dealer for further details.
- For further information on **Q-Link** and connecting equipment. See page 20, 37.

6

We recommend that as soon as the **Auto setup** feature is completed, the picture controls are reset to normal viewing levels. To do this, press the **N** button.



Basic controls: front panel and remote control



Using the On Screen Displays

Many features available on this TV can be accessed via the On Screen Display menu system. Use the remote control as shown below to access and adjust features as desired.

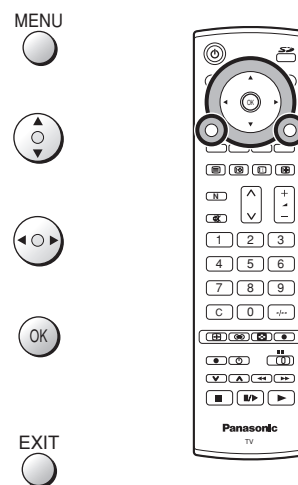
The **MENU** button is used to open the main menus and also to return to the previous menu.

The up and down cursor buttons are used to move the cursor and select menus.

The left and right cursor buttons are used to access menus, adjust levels or to select from a range of options.

The **OK** button is used with a number of features to store settings after adjustments have been made or options have been set.

The **EXIT** button is used to exit the menu system and return to the normal viewing screen.



An On Screen Help box is displayed whenever a menu is displayed on the TV. This Help box indicates which buttons on the remote control are used to navigate the menu shown, see above for descriptions of button functions.

Note:

The Help box is not shown in the menu pictures in this instruction book due to space limitations.

ON SCREEN HELP 'Instructions' box



Sound menu	
Bass	— — — — — +
Treble	— — — — —
Balance	— — — — —
Headphone volume	— — — — —
MPX	No service
Mode	Music
Ambience	Off

Picture menu

Press the **MENU** button.

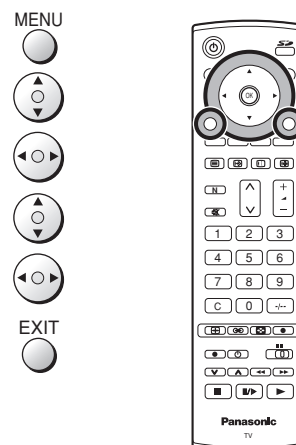
Move to choose **Picture menu**.

Access **Picture menu**.

Move to choose menu option.

Adjust chosen option or access chosen menu.

Press the **EXIT** button at any time to go back to watching TV.



Viewing mode

The Viewing mode menu allows you to select four different screen settings - **Dynamic**, **Normal**, **Cinema** and **Auto**.

In each Viewing mode setting, Contrast, Brightness, Colour, Sharpness, Tint (in NTSC only), Colour balance, P-NR, MPEG NR and 3D-COMB can be adjusted and stored to suit your particular viewing requirement. (e.g., you may require different settings for viewing sports, films, news etc.)

Viewing mode offers you up to a maximum of four separate settings for each signal source: RF, AV1, AV2, AV3 and AV4. Changes will be stored automatically.

By analysing and processing the incoming picture, all four modes feature automatic enhancement.

Contrast, Brightness, Colour, Sharpness

Increase or decrease the levels of these options according to your personal preference.

Tint

The picture hue can be adjusted to suit your taste.

Note:

When the TV is receiving NTSC, YUV(60Hz) signals, Tint is displayed.

Colour balance

Allows you to set the overall colour tone of the picture. Choose from **Cool**, **Normal** and **Warm**.

P-NR

Automatically reduces unwanted picture noise.

MPEG NR

Reduces MPEG noise.

Allows you to choose from **Off**, **Min**, **Mid** and **Max**.

This function is effective in reducing the digital block noise when viewing DVD, VCD or digital broadcasting. The effect will be changed based on the scene and image.

Note:

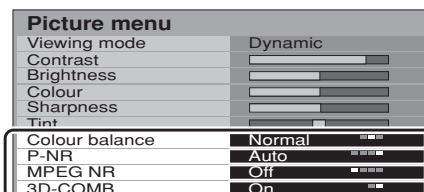
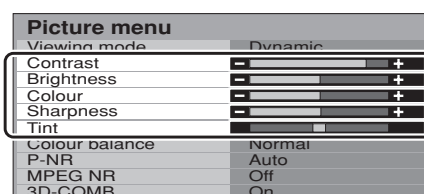
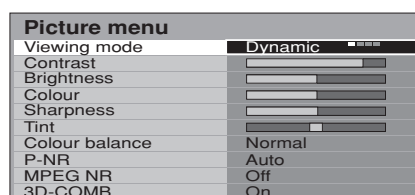
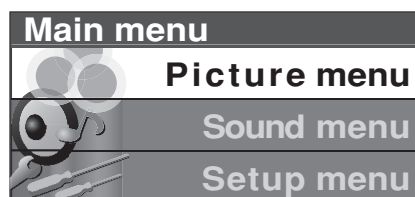
MPEG Compression technology of the image signal adopted by DVD, VCD or digital broadcasting.

3D-COMB

Occasionally, whilst viewing still or slow moving pictures, colour patterning may be seen. Set 3D-COMB to **On** to display sharper and more accurate colours.

Displayed only when receiving PAL or NTSC signals.

Not displayed during RGB Video, S-Video input and AV4C input mode.



Sound menu

Press the **MENU** button.

Move to choose **Sound menu**.

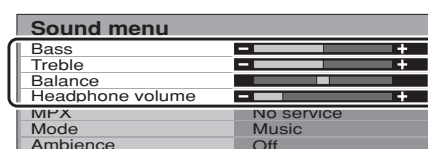
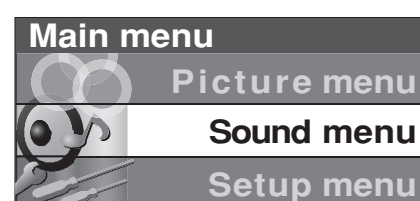
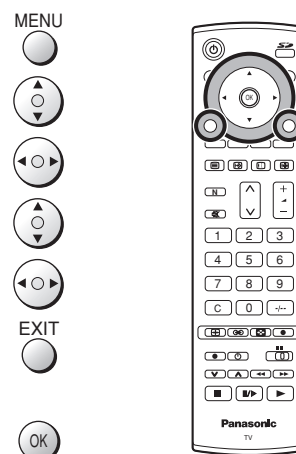
Access **Sound menu**.

Move to choose menu option.

Adjust chosen option or access chosen menu.

Press the **EXIT** button at any time to go back to watching TV.

Pressing the **OK** button after having adjusted some features will store the setting as the default (replacing the factory setting).



Bass Increase or decrease level to enhance or minimise lower, deeper sound output.

Treble Increase or decrease level to enhance or minimise sharper, higher sound output.

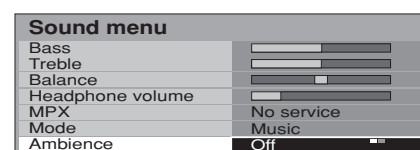
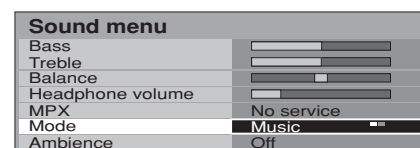
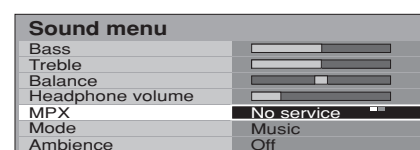
Balance The levels of sound between the left and right speakers can be adjusted to suit your listening position.

Headphone volume Can be adjusted independently of the TV speakers so that everyone can enjoy listening at a level comfortable for them.

MPX Usually set to **Stereo** to provide the best reproduction, but if reception deteriorates or if the service is not available then switch to **Mono**. **Mono (M1)** and **(M2)** can also be selected if a mono signal is being transmitted.

Mode Sound quality can be improved when watching music scene or drama by selecting the appropriate **Music** or **Speech** mode.

Ambience To enjoy a concert hall effect, turn Ambience **On**. Switching is also possible by pressing the **Ambience** button. The benefits of Ambience sound are enormous. You can be completely enveloped in sound; just as if you were at a concert hall or cinema. The Ambience effect can be obtained without the use of external Ambience speakers.



Setup menu

Press the **MENU** button.

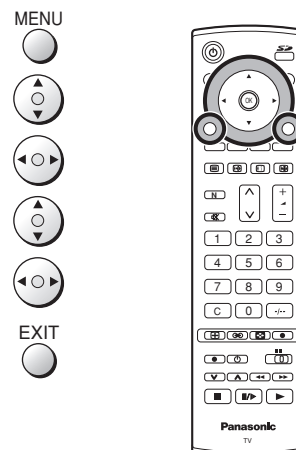
Move to choose **Setup menu**.

Access **Setup menu**.

Move to choose menu option.

Adjust chosen option or access chosen menu.

Press the **EXIT** button at any time to go back to watching TV.



Q-Link Allows you to select which AV terminal is to be used for data communication between this TV and a compatible recording device. Choose from **Off**, **AV2** and **AV4**. See page 20.

AV2 / AV4 out Offers a choice of signals to send to the Scart terminal selected in the Q-Link option. You can choose from the current **TV** programme position, the signal entering **AV1 / AV2 / AV3 / AV4** or **Monitor** - the picture displayed on screen.

Teletext Allows you to choose between **TOP** or **List** mode. See page 33-35.

Off timer Switches the TV off within a preset time which you can choose from between 0 to 90 minutes in 15 minute intervals.

Text language Select character set, so that all characters needed are available for text on teletext pages (e.g., cyrillic characters, etc.).

Mode Languages

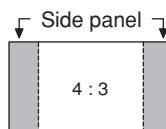
West: English, French, German, Greek, Italian, Spanish, Swedish, Turkish

East1: Czech, English, Estonian, Lettish, Rumanian, Russian, Ukrainian

East2: Czech, English, German, Hungarian, Lettish, Polish, Rumanian

Side panel Allows you to choose from **Off**, **Low**, **Mid** and **High**. Do not display a picture in 4:3, 14:9, Picture out of picture, Picture and picture, Picture and text modes for an extended period, as this can cause an after-image to remain on the side panels either side of the display field.

To prevent the appearance of such an after-image, illuminate the side panels.



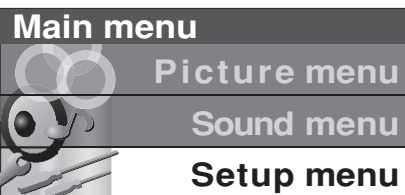
Power save By reducing the brightness of picture, power consumption can be lowered.

Tuning menu Provides access to many other features including **Programme edit** and **Auto setup**. See page 16-18.

OSD language When you first install the TV, the On Screen Display language is set according to your choice of country. **OSD language** lets you change the language used for On Screen Displays.

Colour system During **AV** mode, Colour system is displayed. See page 15.

Volume correction During **AV** mode, Volume correction is displayed. You can adjust volume level of AV mode. Volume level is memorised.



Setup menu	
Q-Link	AV2
AV2 out	TV
Teletext	TOP
Off timer	Off
Text language	West
Side panel	Off
Power save	Off
Tuning menu	
OSD language	

Setup menu	
Q-Link	AV2
AV2 out	TV
Teletext	TOP
Off timer	Off
Text language	West
Side panel	Off
Power save	Off
Tuning menu	Access
OSD language	

Setup menu	
Q-Link	AV2
AV2 out	TV
Teletext	TOP
Off timer	Off
Text language	West
Side panel	Off
Power save	Off
Tuning menu	
OSD language	Access

AV mode

Setup menu	
Q-Link	AV2
AV2 out	TV
Teletext	TOP
Off timer	Off
Colour system	Auto
Volume correction	
Text language	West
Side panel	Off
Power save	Off
OSD language	

Tuning menu – overview

Press the **MENU** button.

Move to choose **Setup menu**.

Access **Setup menu**.

Move to choose **Tuning menu**.

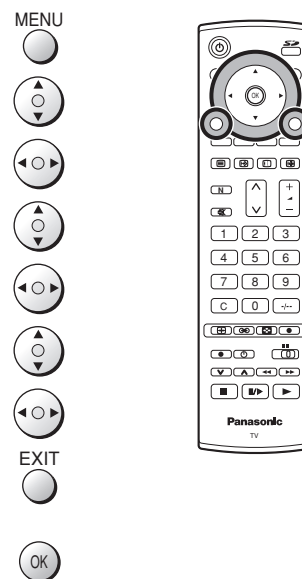
Access **Tuning menu**.

Move to choose menu option.

Adjust chosen option or access chosen menu.

Press the **EXIT** button at any time to go back to watching TV.

Pressing the **OK** button after having adjusted some features will store the setting as the default (replacing the factory setting).



Programme edit Access in order to customize your programme settings (e.g., adding or deleting a programme position). See page 16, 17.

Auto setup Allows you to automatically retune the TV. Useful if you move house and wish to retune your TV to the local stations. See page 18.

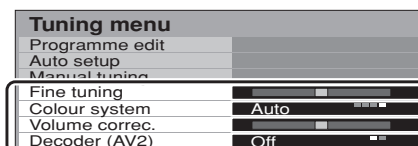
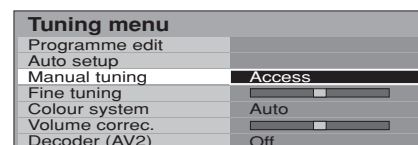
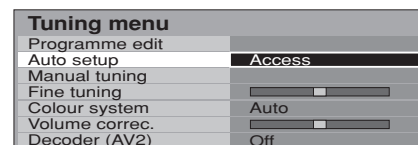
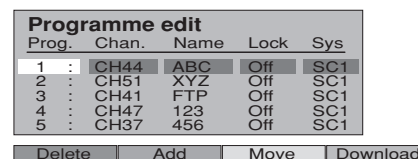
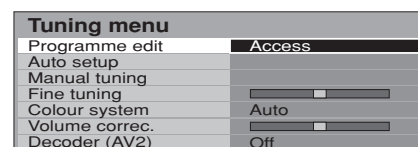
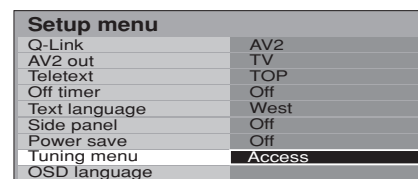
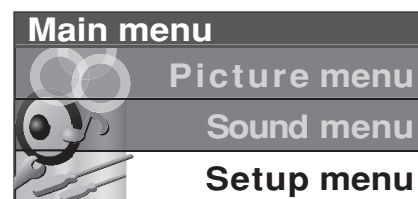
Manual tuning Allows individual programme positions to be tuned manually. See page 19.

Fine tuning Use to make small adjustments to the tuning of an individual station (useful for example when weather conditions are affecting reception quality of a programme).

Colour system Lets you select the correct transmission standard for the transmission signal being received.

Volume correc. Lets you adjust the volume level of individual stations. Use this feature if the volume level varies significantly between stations. Adjusting one station's volume to bring it into line with the other stations means you can avoid having to adjust the volume each time you change channels.

Decoder (AV2 / AV4) This option is used when a decoder is connected via AV2 / AV4. Store the setting as **On** so that every time this programme position is selected, the TV software is set to handle the decoded information (this is important if your decoder unit is connected to AV2 / AV4 via a Q-Link device).



Tuning menu – Programme edit

Press the **MENU** button.

Move to choose **Setup menu**.

Access **Setup menu**.

Move to choose **Tuning menu**.

Access **Tuning menu**.

Move to choose **Programme edit**.

Access **Programme edit**.

Move to choose programme position (e.g., Prog. 3).

Make required change, e.g., moving a programme channel (see the relevant procedure below).

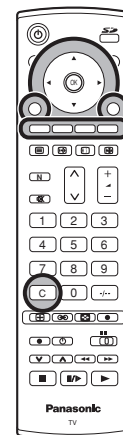
Press the **EXIT** button at any time to go back to watching TV.

Pressing the **OK** button after having adjusted some features stores the change made.

MENU



EXIT

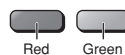


Adding / deleting a programme channel

Make sure the cursor is in the **Prog.** column.



Press the **Green** button to add a programme channel to the programme position, or the **Red** button to delete one.



Press the same button again to confirm your decision.

Programme edit				
Prog.	Chan.	Name	Lock	Sys
1	CH44	ABC	Off	SC1
2	CH51	XYZ	Off	SC1
3	CH41	FTP	Off	SC1
4	CH47	123	Off	SC1
5	CH37	456	Off	SC1

Add Cancel

Moving a programme channel

Make sure the cursor is in the **Prog.** column.



Press the **Yellow** button.



Choose the new position for the programme channel.



Press the **Yellow** button again to confirm your decision.

Programme edit				
Prog.	Chan.	Name	Lock	Sys
1	CH44	ABC	Off	SC1
2	CH51	XYZ	Off	SC1
3	CH41	FTP	Off	SC1
4	CH47	123	Off	SC1
5	CH37	456	Off	SC1

Confirm Cancel

Tuning a programme channel

Move to the **Chan.** column.



Increase or decrease the programme channel number (you will see the TV retune to the new number as you change it) or use the **C** button for Direct Channel Access. See page 10.



Press the **OK** button to store this change.



Programme edit				
Prog.	Chan.	Name	Lock	Sys
1	CH44	ABC	Off	SC1
2	CH51	XYZ	Off	SC1
3	CH41	FTP	Off	SC1
4	CH47	123	Off	SC1
5	CH37	456	Off	SC1

Tuning menu – Programme edit

Renaming a programme channel

Move to the **Name** column.

Choose the new character. The box at the bottom of the screen shows the character currently selected.

Move to the next character position.

Continue until renaming is done.

Press the **OK** button to store the new name.



Programme edit				
Prog.	Chan.	Name	Lock	Sys
1	: CH44		Off	SC1
2	: CH51	XYZ	Off	SC1
3	: CH41	FTP	Off	SC1
4	: CH47	123	Off	SC1
5	: CH37	456	Off	SC1

ABCDEFGHIJKLMNOPQRSTUVWXYZ
UVWXYZ+-,0123456789

Locking a programme channel

You may wish to lock a programme channel to prevent access to it.

Move to the **Lock** column.

Choose between Lock **On** or Lock **Off**.

Press the **OK** button to store the new setting.



Programme edit				
Prog.	Chan.	Name	Lock	Sys
1	: CH44	ABC	Off	SC1
2	: CH51	XYZ	Off	SC1
3	: CH41	FTP	Off	SC1
4	: CH47	123	Off	SC1
5	: CH37	456	Off	SC1

Note:

When a programme position is locked, Direct Channel Access using the **C** and numeric buttons on the remote control is not available.

Changing the sound system for a channel

You can change the sound system used for a programme channel.

Move to the **Sys** column.

Choose the required sound system:

SC1 : PAL B, G, H / SECAM B, G

SC2 : PAL I

SC3 : PAL D, K / SECAM D, K

F : SECAM L / L'

Press the **OK** button to store the new setting.



Programme edit				
Prog.	Chan.	Name	Lock	Sys
1	: CH44	ABC	Off	SC1
2	: CH51	XYZ	Off	SC1
3	: CH41	FTP	Off	SC1
4	: CH47	123	Off	SC1
5	: CH37	456	Off	SC1

Copying programme information to a recording device

You can copy programme information to a compatible recording device connected to AV2 / AV4. See page 37 for connection information.

Press the **Blue** button.

Programme data will now be sent to the recording device(s). This might take a few seconds, depending on the number of stations stored. If the message "Feature not available" appears on the screen, the television is unable to send the programme information to the recording device(s). See the device's instruction book for further information.



DOWNLOAD IN PROGRESS
PLEASE WAIT
Programme : 63
Remote control unavailable

Note:

This is not available when you choose Q-Link Off in Setup menu.

Tuning menu – Auto setup

Auto setup automatically retunes your TV. This feature is useful if, e.g., you move house and wish to retune your TV to receive the local stations.

➔ Press the **MENU** button.

Move to choose **Setup menu**.

Access **Setup menu**.

Move to choose **Tuning menu**.

Access **Tuning menu**.

Move to choose **Auto setup**.

Access **Auto setup**.

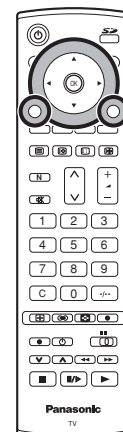
Press to confirm start.

Notes:

- If you proceed with the next step all tuning data will be erased (all stations and their programme positions stored in your TV's memory will be wiped out so the new settings can be stored).
- If you exit the procedure after this point and before **Auto setup** is complete, no station information will be stored. Restart and complete the Auto setup procedure so that the TV is retuned.

Select your country.

MENU



WARNING
All current tuning data will be erased

Start Auto Setup ———> Return ———> Exit

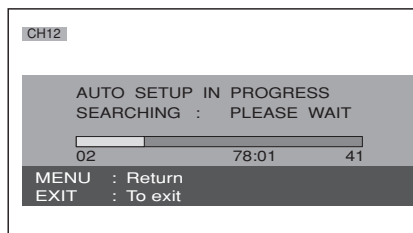
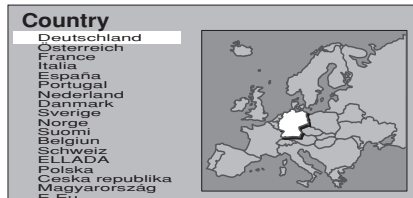
Press to start **Auto setup**.

The TV will search for, locate, store and then sort into order your local stations.

If compatible recording device is connected via the AV2 / AV4 terminal, programme data will be sent to the device via Q-Link. See page 20.

Once this operation is completed the TV will display the programme now stored on programme position 1.

Press the **EXIT** button at any time to go back to watching TV (please read the **Notes** in the above procedure).



Tuning menu – Manual tuning

It is possible to retune individual programme positions:

Press the **MENU** button.

Move to choose **Setup menu**.

Access **Setup menu**.

Move to choose **Tuning menu**.

Access **Tuning menu**.

Move to choose **Manual tuning**.

Access **Manual tuning**.

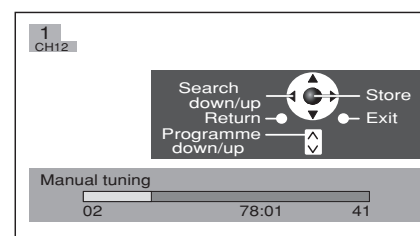
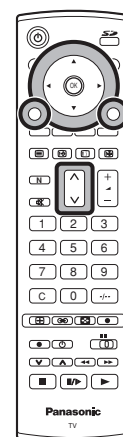
Select the programme position to be tuned.

Press repeatedly until required station is found.

When the desired station is found, press the **OK** button to store.
The programme position will flash.

Press the **EXIT** button at any time to go back to watching TV.

MENU



Note:

When using a VCR without video and audio input / output terminals, it is convenient to connect the antenna cable as indicated in the instruction book of VCR and to set the designated channel to programme No."0". In that case, perform Manual tuning after setting the Colour system in advance. Further, in multi-system VCR, it is more convenient to set the designated channel to several programme numbers.

Manual tuning (via front panel)

It is also possible to use the control panel buttons on the front of your TV to tune individual programme positions:

Press the **F** button until **Tuning mode** is reached.

Press the **-/V** or **+/\A** button to access **Tuning mode**.

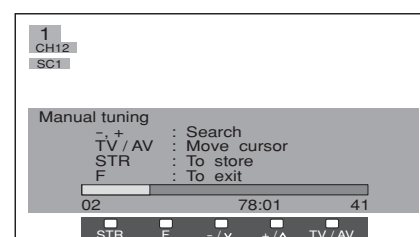
Press the **TV/AV** button to move between **Change programme**, **Search** and **Change TV system**.

Press the **-/V** or **+/\A** button to change programme position or start search.

When the desired station is found, press the **STR** button to store.
The programme position will flash.

Repeat above procedure to tune additional programme positions.

Press the **F** button at any time to go back to watching TV.



Q-Link

Q-Link allows the television to communicate with a compatible VCR or DVD Recorder.

For Q-Link communication to work, the TV must be connected to a recording device with the “Q-Link”, “NEXTVIEWLINK”, “DATA LOGIC”, “Easy Link”, “Megalogic” or “SMARTLINK” logo using a “fully wired” Scart cable between the AV2 / AV4 terminal of the television and the appropriate terminal on your VCR or DVD Recorder.

For connection to the appropriate Scart terminal on the recording device, refer to the device’s instruction book.

When using a “NEXTVIEWLINK” device the main features possible are the following :

Preset Download

This allows the programme order from the TV to be downloaded to the recording device, helping to ensure that correct recordings are made; there are several ways to perform this operation :

1. During installation as explained in the “Quick Start Guide” on page 8, 9.
2. When Auto setup is started from within the Tuning menu. See page 15.
3. Preset download started from the recording device, refer to the device’s instruction book.

Important Note:

Not all recording devices support this type of data communication system. Some may support certain features, but not others. Refer to the recording device’s instruction book.

If Q-Link is inoperative, first confirm that your Scart cable is a “fully wired” type. Ask your dealer for further details.

What You See Is What You Record (DIRECT TV RECORDING)

This will allow the immediate recording of the programme currently shown on the TV, by the recording device attached to the Scart terminal, which can be chosen using “Q-Link”. See page 14.

Press the **DIRECT TV REC** button.



If the recording device is in Standby mode with usable recording media inserted, it will automatically switch on when you press the **DIRECT TV REC** button.

If a “Q-Link” device is connected, a message will appear on the TV screen showing what is being recorded, or if it is not possible to record. Some “Q-Link” compatible devices will only display the message when on the VCR programme position(0) or in AV mode. Refer to the device’s instruction book.



Recording in progress

The recording device is recording the programme signal from its own tuner. If you wish you can switch off the TV and leave the device recording in the normal way.

No recording -Check tape or disc

The tape or disc may have been “write protected”, missing or may be damaged. The device may already be recording.

Refer to the device’s instruction book.

Additionally, when using a “Q-Link” device the main features possible are the following :

The following features are only available from the device connected to the Scart terminal selected using “Q-Link”. See page 14.

TV / Recording device Auto Power On

If you insert pre-recorded media into the recording device and press the Play button whilst the TV is in Standby mode, the TV will automatically switch on and select the correct AV input so that you can view the content.

Recording device Auto Power Standby

When the TV is switched into Standby mode, the recording device will also switch into Standby mode if there is no media inserted, or if there is media inserted and the device is in Rewind or Stop mode. If a VCR is rewinding a tape, it will not switch into Standby mode until rewinding has finished.

Recording device Image View On

If the TV is in Standby mode and the recording device sends a menu to be displayed on the TV screen (e.g., Main menu), the TV will automatically switch On and the menu will be displayed.

Some other devices may support this feature. Refer to the device’s instruction book.

This TV will also communicate with other recording device’s that bear the following logos :

- “DATA LOGIC” (a trademark of Metz Corporation)
- “Megalogic” (a trademark of Grundig Corporation)
- “Easy Link” (a trademark of Philips Corporation)
- “SMARTLINK” (a trademark of Sony Corporation)

Important Note:

These recording devices may support some or all of the above functions.

Not all recording devices support this type of data communication system. Some may support certain features, but not others. Refer to the device’s instruction book. Some features are only available from the device connected to the Scart terminal selected using “Q-Link”. See page 14.

If Q-Link is inoperative, first confirm that your Scart cable is a “fully wired” type. Ask your dealer for further details.

Aspect Controls

The Widescreen TV will allow you to enjoy viewing the picture at its optimum size and aspect, including widescreen cinema format pictures.

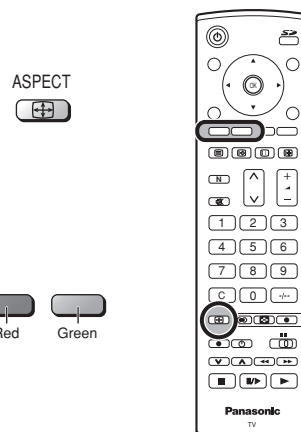
Press the **ASPECT** button repeatedly to move through the eight aspect options:

Panasonic Auto, 16:9, 14:9, Just, 4:3, Zoom1, Zoom2 and Zoom3

PC mode: 16:9, Just, 4:3 and Zoom

OR

Press the **ASPECT** button. Whilst the on screen selector keys are displayed, use the **Red** or **Green** buttons to move in either direction through the eight aspect options (except PC mode and Photo View mode).



Panasonic Auto

Panasonic Auto determines the best aspect ratio to use to fill your screen. It does this using a four step process to determine if the picture being viewed is a widescreen picture.

If **Panasonic Auto** detects a widescreen signal it switches into the appropriate widescreen mode. If **Panasonic Auto** does not detect a widescreen signal then this advanced TV set enhances the picture for optimum viewing pleasure.

The text shown on the screen indicates how **Panasonic Auto** determined which ratio to use:

“WIDE” appears in the top left of the screen if a widescreen identification signal (WSS) is found or a signal found through a Scart terminal.

Panasonic Auto switches to the appropriate widescreen ratio.

“Panasonic Auto” appears in the top left of the screen if black stripes above and below the picture are detected.

Panasonic Auto chooses the best ratio and expands the picture to fill the screen. This process can take several minutes, depending on the darkness of the picture.

You may prefer to manually select one of the other aspect options available to view the picture.

Notes:

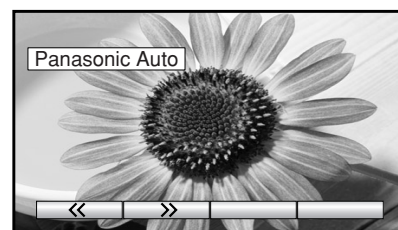
- If, in Panasonic Auto mode, you experience problems with the screen display size when playing back widescreen format recordings from your VCR then it is possible that the tracking control of your VCR requires adjustment (your VCR instruction book will contain adjustment details).
- The widescreen aspect ratios of different films and programmes can vary. If these are wider than a standard 16:9 aspect picture then a black band may be visible at the top and bottom of the screen.



“WIDE” appears in the top left of the screen, **Panasonic Auto** switches to the appropriate 16:9 or 14:9 widescreen ratio.



“Panasonic Auto” appears in the top left of the screen. The best ratio is chosen and the picture expanded to fill the screen.

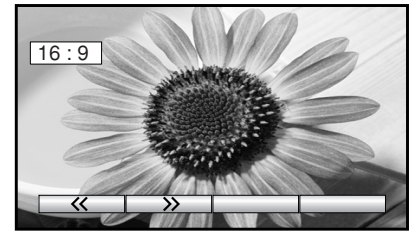


Press the **ASPECT** button, then use the **Red** or **Green** buttons to move in either direction through the eight aspect options.

Aspect Controls

16 : 9

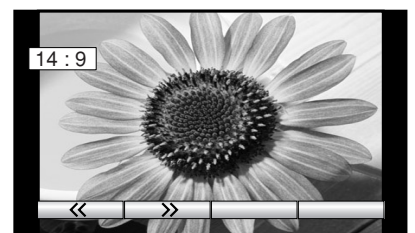
16:9 will display a true 16:9 (anamorphic) picture with no aspect distortions.



16 : 9

14 : 9

14:9 will display a 14:9 picture at its standard 14:9 size without any stretching.



14 : 9

Just

Use **Just** when you wish to expand a 4:3 picture to fill the whole screen (rather than watching a programme with black stripes down the left and right sides of the picture).

The 4:3 picture will be stretched horizontally so that the image fills the screen, this is done in such a way that the stretching is only obvious at the left and right edges of the screen.



Just

4 : 3

4:3 will display a 4:3 picture at its standard 4:3 size with no aspect distortions.

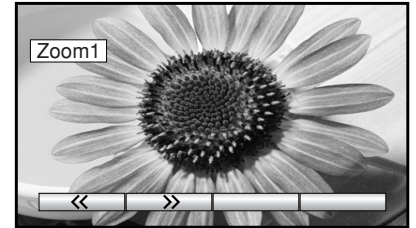


4 : 3

Aspect Controls

Zoom1

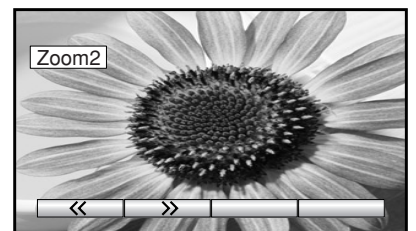
Zoom1 will display 16:9 letterbox or 4:3 pictures with no aspect distortions.



Zoom1

Zoom2

Zoom2 will display 16:9 anamorphic letterbox pictures as a full screen display with no aspect distortions.

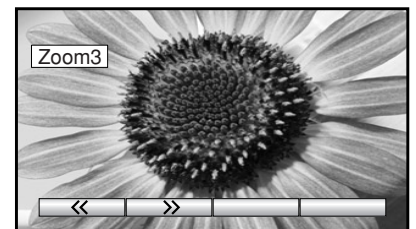


Zoom2

Zoom3

Zoom3 will display 21:9 letterbox pictures as a full screen display with no aspect distortions.

16:9 will display the picture at its maximum size but with slight stretching.



Zoom3

Multi window

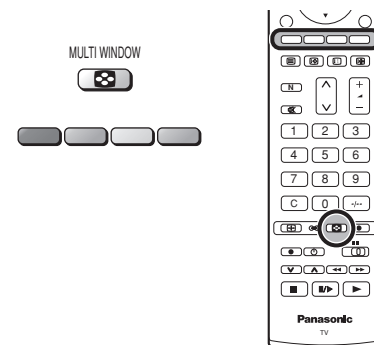
Press the **MULTI WINDOW** button. Whilst the on screen selector keys are displayed, use the **Red** or **Green** buttons to move between the **picture in picture** feature, **picture out of picture** and **picture and picture** feature.

The on screen selector keys that appear for the features clear after a few seconds. If you want to select an operation when the keys are not shown, press the **MULTI WINDOW** button again and the keys will reappear.

Press the **MULTI WINDOW** button (whilst the selector keys are displayed) to return to normal viewing.

Note:

This TV has one tuner. When the main and sub windows are both TV mode, these are the same TV channel.



Picture in picture

Allows two pictures to be viewed at the same time.

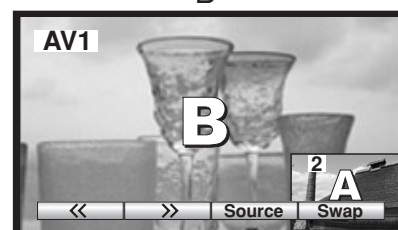
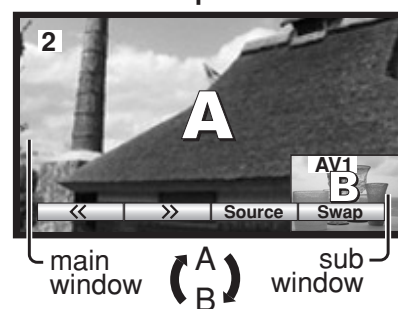
Press the **Yellow** button to select the contents of the smaller window, switching between displaying a TV channel and all AV sources in turn.

To change the TV channel: press the **Yellow** button until the currently selected TV channel is shown, then use the remote control to change channel (whilst the on screen selector keys are still displayed).

Press the **Blue** button to swap the contents of the two windows.

Use the remote control to select a TV channel or an AV source to appear in the main window.

Picture in picture mode



The two pictures have been swapped, the picture in the smaller window has become the main window picture.

Picture out of picture

Allows two pictures to be viewed at the same time, as picture in picture does. The difference is how the two pictures are displayed: in picture in picture the smaller window appears within the main picture; in picture out of picture the smaller window appears to the right of the main picture.

Press the **Yellow** button to select the contents of the smaller window, switching between displaying a TV channel and all AV sources in turn.

To change the TV channel: press the **Yellow** button until the currently selected TV channel is shown, then use the remote control to change channel (whilst the on screen selector keys are still displayed).

Press the **Blue** button to swap the contents of the two windows.

Use the remote control to select a TV channel or an AV source to appear in the main window.

Picture out of picture mode



Picture and picture mode

Allows two pictures to be viewed at the same time.

Press the **Yellow** button to select the contents of the right window, switching between displaying a TV channel and all AV sources in turn.

To change the TV channel: press the **Yellow** button until the currently selected TV channel is shown, then use the remote control to change channel (whilst the on screen selector keys are still displayed).

Press the **Blue** button to swap the contents of the two windows.

Use the remote control to select a TV channel or an AV source to appear in the left window.



Still

Press the **HOLD** button to freeze the picture.
Press again to return to watching the current programme.



Channel search

Press the **INDEX** button to show freeze-frames of the programmes being broadcast on all of the stored channels. These images are displayed in series, starting from the top left.

The feature cycles through the stored channels until the **INDEX** button is pressed to exit the feature.

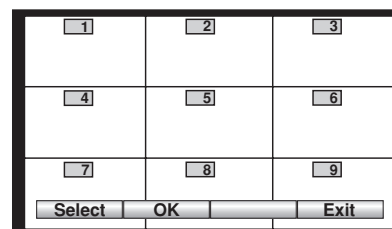
Press the **Red** button to select each channel's freeze-frame in turn.

Press the **Green** button to watch the selected channel, exiting the feature.

Press the **Blue** button to watch the current programme, exiting the feature.



Channel search



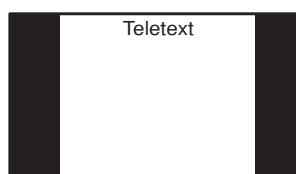
Picture and text

Press the **TV/TEXT** button, followed by the **MULTI WINDOW** button to move between viewing teletext and the picture and text feature. Picture and text lets you see the current programme and a page of teletext side by side.

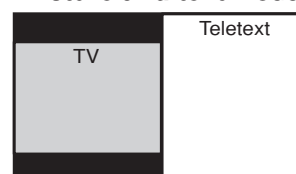
Whilst using this feature, the remote control affects the teletext page; if you wish to make changes to the programme viewed press the **TV/TEXT** button to return to watching the programme on its own then make the desired changes.



Teletext mode



Picture and text mode

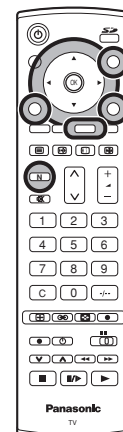


PC mode

When you switch to PC input (AV3/PC), the menu will be changed.

Press the **TV/AV** button. Whilst the on screen selector keys are displayed, press the **Yellow** button to access PC mode.

Press the **TV/AV** button again to go back to watching TV.



Picture

During **PC mode**

Press the **MENU** button.

Move to choose **Picture**.

Access **Picture**.

Move to choose menu option.

Adjust chosen option or access chosen menu.

Press the **EXIT** button at any time to exit Picture.



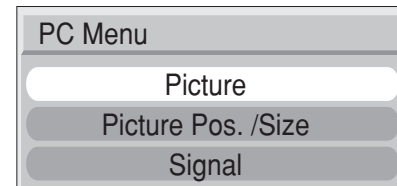
Note:

Press the **N** button or press  whilst the cursor is at the "Normalise" position to reset all settings to their default levels.

Picture Mode

The Picture Mode menu allows you to select four different screen settings - **Normal**, **Dynamic**, **Cinema** and **Auto**.

In each Picture Mode setting, Contrast, Brightness and Sharpness can be adjusted and stored to suit your particular viewing requirement.

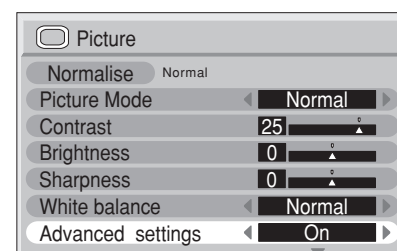


Contrast, Brightness, Sharpness

Increase or decrease the levels of these options according to your personal preference.

White balance

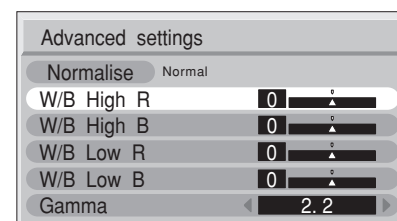
Allows you to set the overall colour tone of the picture. Choose from **Cool**, **Normal** and **Warm**.



Advanced settings

Advanced settings **On** enables fine picture adjustment at a professional level.

- W/B High R** : Adjusts the white balance for light red areas.
- W/B High B** : Adjusts the white balance for light blue areas.
- W/B Low R** : Adjusts the white balance for dark red areas.
- W/B Low B** : Adjusts the white balance for dark blue areas.
- Gamma** : S Curve $\longleftrightarrow$ 2.0 $\longleftrightarrow$ 2.2 $\longleftrightarrow$ 2.5



Note:

Carry out "W/B" adjustment as follows.

1. Adjust the white balance of the bright sections using the "W/B High R" and "W/B High B" settings.
2. Adjust the white balance of the dark sections using the "W/B Low R" and "W/B Low B" settings.
3. Repeat steps 1 and 2 to adjust.

Steps 1 and 2 affect each other's settings, so repeat each step in turn to make the adjustment.

PC mode

Picture Pos. /Size

During PC mode

Press the **MENU** button.

Move to choose **Picture Pos. /Size**.

Access **Picture Pos. /Size**.

Move to choose menu option.

Adjust chosen option or access chosen menu.

Press the **EXIT** button at any time to exit Picture Pos. /Size.

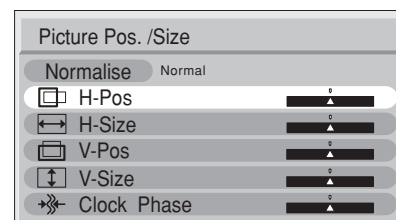
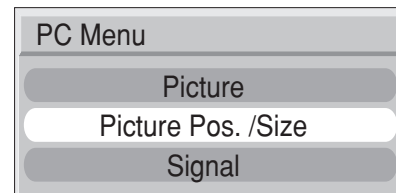
Note:

Press the **N** button or press  whilst the cursor is at the "Normalise" position to reset all settings to their default levels.

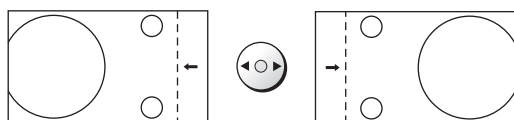
MENU



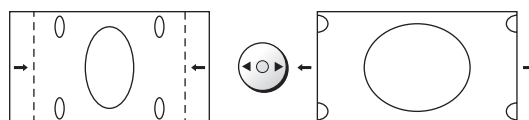
EXIT



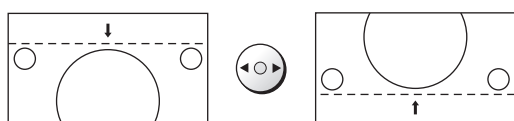
H-Pos Adjust the horizontal position.



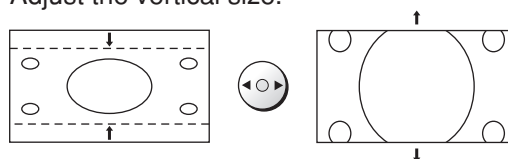
H-Size Adjust the horizontal size.



V-Pos Adjust the vertical position.



V-Size Adjust the vertical size.



Clock Phase Eliminate the flickering and distortion.

Signal

During PC mode

Press the **MENU** button.

Move to choose **Signal**.

Access **Signal**.

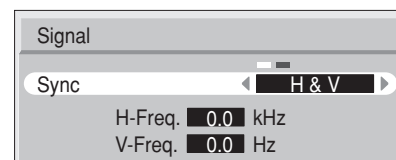
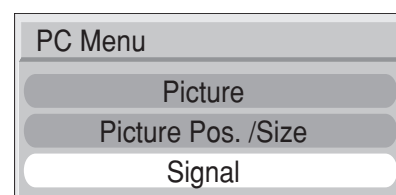
Adjust **Sync**.

Press the **EXIT** button at any time to exit Signal.

MENU



EXIT



Sync

H & V : To synchronize by the horizontal and vertical signals from your PC.

on G : To synchronize by the green signal from your PC (if available).

Photo View mode

Still image data (JPEG) made with a digital camera or digital video camera can be played back using an SD Card / PC Card.

Displayable Image Formats: Baseline JPEG 64 × 64 – 8,192 × 8,192 pixels (sub-sampling 4:2:2 or 4:2:0)

Displayable number of folders: Max 100

Notes:

- Some parts of an image may not be displayed or the image may be displayed on a smaller scale depending on the size of the image.
- Only EXIF standard JPEG images can be displayed on this TV.
- Photo view cannot support over 3000 JPEG files.
- Cards must be formatted with FAT12 or FAT16 in order to be viewed on this TV.
- Photo view is not compatible with card type hard disk (Micro Drive, Mobile type hard disk).
- Some PC Cards may not be usable.
- Without operations for 5 minutes, Screensaver will start automatically to prevent image retention (except Slide show). To exit, press any button.

Card Data Protection

- Do not remove the card whilst it is being accessed.
- Do not touch the terminals on the back of the SD Card / PC Card.
- Electrical interference, electrostatic discharges and malfunctions of the TV set or card may all result in damage to the card or data loss. It is recommended that any important data also be backed up on a PC.
- Stored data should be periodically backed up as a protection against data corruption, data loss or device malfunction. Please note that our company shall not accept any liability for damage or loss of stored data.
- Before inserting or removing the PC Card, make sure that the TV is turned off. Otherwise, it may damage the unit. Do not insert anything other than the PC Card.

Cautions:

- Always insert card in the correct direction. Failure to do so may result in damage to the card and this set.
- The SD Card and PC Card are precision devices. Do not subject them to excessive pressure or strong impacts.

Warning:

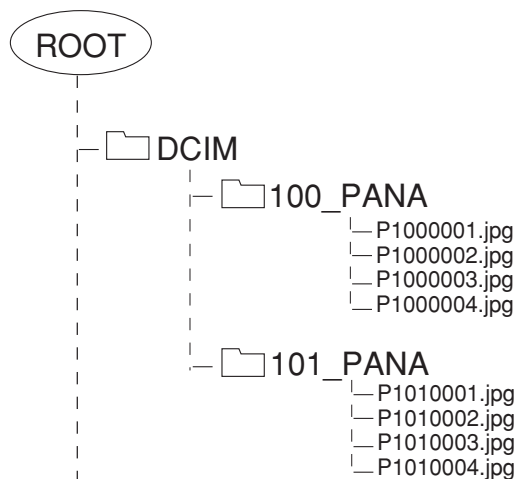
As with any small object, SD Cards can be swallowed by young children. Do not allow children to handle the SD Card. Please remove the SD Card immediately after use.

Folders and Files

Digital cameras that are compliant with DCF specifications use folders with a specific structure. The following diagram shows an example of the folder structure.

Example:

If the Card file hierarchy is displayed on the PC as shown below.



DCIM Folder

The digital camera creates this folder automatically.

100_PANA Folder

Folder names consist of a 3-digit folder number which is followed by five arbitrary characters. Digital camera images are stored within these folders.

JPEG files in the 100_PANA folder are displayed when a Card, which is structured as shown left, is inserted.

Notes:

- The folder name may vary according to the digital camera being used.
- When a directory or file is created, only the characters "A-Z", "a-z", "0-9" and "_" are used. Two-byte characters or other special codes shall not be used.

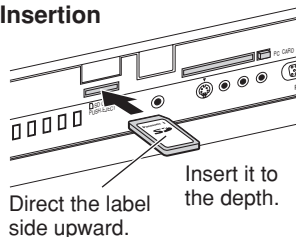
P1000001.JPG: DCF File

File names consist of four arbitrary characters followed by a 4-digit file number. DCF files are image files (normally JPEG files) that have been taken by a digital camera.

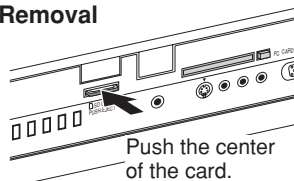
Photo View mode

SD Card

Insertion



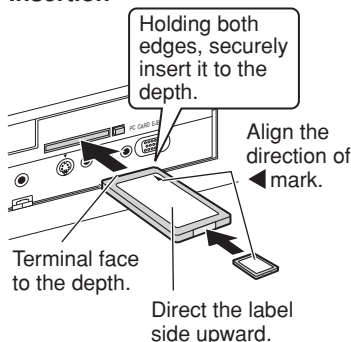
Removal



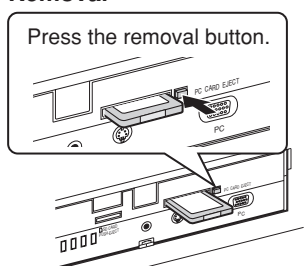
PC Card

Before inserting or removing the PC Card, make sure that the TV is turned off. Otherwise, it may damage the unit. Do not insert anything other than the PC Card.

Insertion



Removal



If PC Card cannot be removed
Push in PC Card again, and press the removal button.

Caution

If PC Card adapter is used, remove it together with the adapter.

Compatible Card

SD Card slot	PC Card slot
SD Card	Compact Flash*
Multi Media Card	Smart Media*
miniSD Card	Memory Stick*
	xD Picture Card*
	Flash ATA Card*

- miniSD Card requires miniSD™ adapter.
- The media* listed in the right column above can be read via the PC Card in the PC Card adapter.
- Hard disk PC Cards and other recorded media cannot be used.
- Place the selected media onto the PC Card and then insert into the PC Card Slot.
- When both SD Card and PC Card are inserted, the SD Card contents have priority and will be displayed.
- If the Card is incompatible, "This type of card is not supported" is displayed on screen. Remove the Card only when Access indication is not displayed.
- If the file is not formatted with FAT12 or FAT16, "This type of format is not supported" is displayed.
- If the JPEG file is corrupted and cannot be decoded, "This type of image is not supported" is displayed.

Notes:

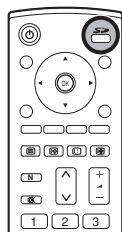
- Insert / remove the SD Card while Card Menu Screen or "Card is not inserted correctly" is displayed.
- Be sure Access indication is not displayed before Card insertion / removal.
- Before reinserting the SD Card after removing it, wait until "Card is not inserted correctly" is displayed. If there are Cards in both Card Slots, wait until the Card Menu Screen of the other Slot is displayed and Access indication is no longer displayed before reinserting the Card.
- If the JPEG is modified using a PC, it will not be displayed on the TV.
- It may take long time to display the thumbnail if there are lots of files or if the file size is big.

Press the **SD** button.



The screen below is displayed automatically when a card is inserted. If "Card is not inserted correctly" appears, confirm that a card is correctly inserted.

Press the **SD** button again to exit Photo View mode.



Card Menu Screen

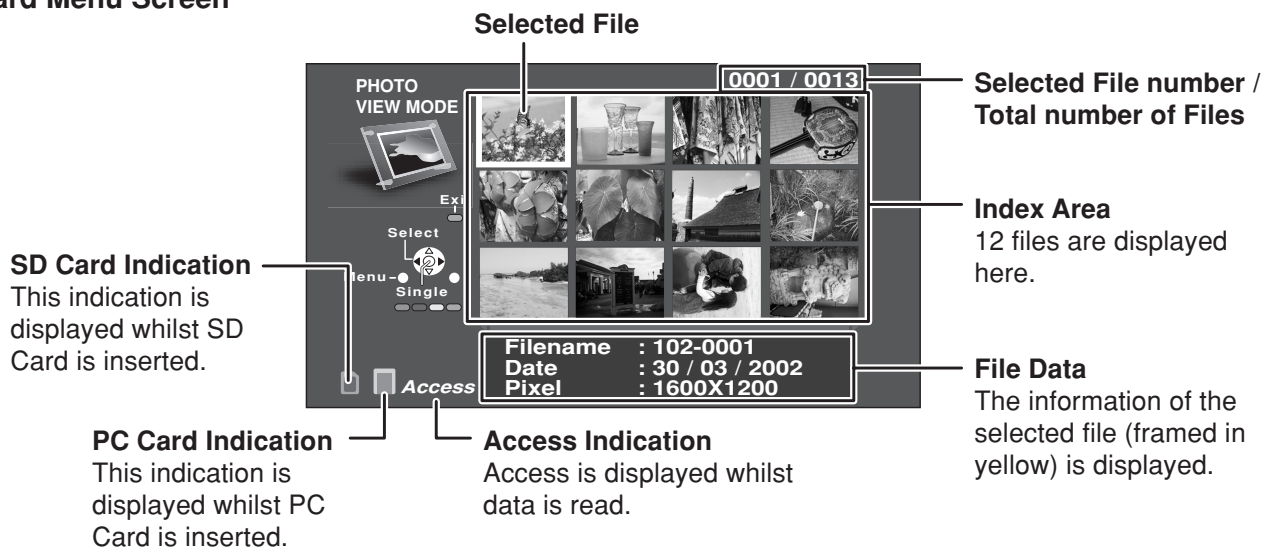


Photo View mode

Picture menu

During **Photo View mode**

Press the **MENU** button.

Move to choose **Picture menu**.

Access **Picture menu**.

Move to choose menu option.

Adjust chosen option or access chosen menu.

Press the **EXIT** button at any time to exit Picture menu.

MENU



EXIT



Main menu

Picture menu

Viewing setup

Picture menu

Contrast	-	+
Brightness	-	+
Colour	-	+
Sharpness	-	+
Tint	-	+
Colour balance	Normal	

Picture menu

Contrast	
Brightness	
Colour	
Sharpness	
Tint	
Colour balance	Normal

Contrast, Brightness, Colour, Sharpness

Increase or decrease the levels of these options according to your personal preference.

Tint

The picture hue can be adjusted to suit your taste.

Colour balance

Allows you to set the overall colour tone of the picture. Choose from **Cool**, **Normal** and **Warm**.

Viewing setup

During **Photo View mode**

Press the **MENU** button.

Move to choose **Viewing setup**.

Access **Viewing setup**.

Move to choose menu option.

Adjust chosen option or access chosen menu.

Press the **EXIT** button at any time to exit Viewing setup.

MENU



EXIT

Main menu

Picture menu

Viewing setup

Viewing setup

Slide show	Access
Interval	5Sec
Sequence	Order
Repeat	On
Card	PC

Viewing setup

Slide show	
Interval	5Sec
Sequence	Order
Repeat	On
Card	PC

Slide show

Provides access to Slide Show mode. See page 31.

Interval

When the Slide Show, allows you to select the display intervals between 5 to 90 seconds.

Sequence

When the Slide Show, allows you to select the **Order** or **Random**.

Repeat

When Repeat is **On**, the Slide Show repeats automatically.

Card

Select either **SD** or **PC** when both cards are inserted in the slots.

Photo View mode

When you press the **SD** button, thumbnail screen is displayed automatically.
After that you can choose your desirable view mode between the following three modes.

Multi mode

12 images are displayed.

Press to select desired image.

Press the **OK** button to display Single mode.



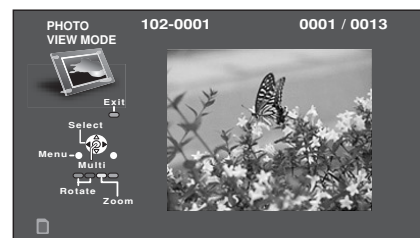
Single mode

A single image selected from the index area fills the screen.
You can also rotate or magnify the image.

Press to select the next or previous image.

Press the **OK** button to display Multi mode.

Press the **Red** or **Green** button to rotate the image.
Each press rotates images 90 °.



Press the **Yellow** button to magnify the image.
To restore press the **Blue** button.



Slide Show

Images are displayed one after another as a slide show.

To start Slide Show access **Viewing setup**.
After setting Interval, Sequence and Repeat, access **Slide show**.
When both SD Card and PC Card are inserted, move to choose Card and select SD or PC before accessing Slide show.
See page 30.

Press the **OK** button at any time to return to the Single mode.



Viewing setup	
Slide show	
Interval	5Sec
Sequence	Order
Repeat	On
Card	PC

Viewing setup	
Slide show	Access
Interval	5Sec
Sequence	Order
Repeat	On
Card	PC

Note:

When you are in the Slide Show mode, you can change the Aspect of the image on screen by pressing the **ASPECT** button on the remote control.

VCR / DVD operation

The Remote Control is capable of operating some functions of selected Panasonic VCRs and DVD (Digital Versatile Disc) equipment. Some VCR and DVD equipment have different functions, so to ensure compatibility please refer to the equipment's instruction book or consult your dealer for details.



	Standby Press to switch the VCR, DVD or DVD recorder to Standby mode. Press again to switch back on.
	VCR / DVD switch Use this switch to select whether controls operate the DVD equipment or VCR.
	Play Press to playback the tape or DVD.
	Stop Press to stop the tape or DVD.
	Skip / Fast Forward / Cue VCR: Press to fast forward the tape. In Play mode, press to view the picture rapidly forward (Cue). DVD: Press once to skip to the next track.
	Skip / Rewind / Review VCR: Press to rewind the tape. In Play mode, press to view the picture rapidly in reverse (Review). DVD: Press once to skip to the previous track.
	Pause / Still Press in Play mode, the picture will pause. Press again to restart play.
	Programme Up / Down Press to increase or decrease the programme position by one.
	Record Press this button to start recording.

Teletext operation

- Teletext features may vary depending on the Broadcasting Companies and is only available if the channel selected is transmitting Teletext.
- Pressing the **MENU** button whilst in Teletext operation will display the contrast function with a cyan bar, press  to alter the setting as required.
- Pressing the **MENU** button whilst in Teletext operation will display special function options at the bottom of the screen.
- Pressing the **Volume up / down** button whilst in Teletext operation will display the volume function with a green bar, press  to alter the setting as required.

What is List mode ?

In List mode, four differently coloured page numbers are situated at the bottom of the screen. Each of these numbers can be altered and stored in the TV's memory.

What is TOP mode?

In TOP mode, four differently coloured subjects are situated at the bottom of the display. To access more information about one of these subjects, press the appropriately coloured button. This facility enables fast access to information on the subjects shown.

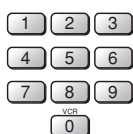
Note:

If Teletext is in use, the aspect ratio is set to 16:9.



TV / Teletext mode

Press the **TV/TEXT** button to switch between the current programme.



Page Selection

Pages can be selected in two ways :

- Press the Up / Down buttons to increase or decrease the page number by one.
- By entering the page number, using 0 - 9 on the remote control.



Full / Top / Bottom

Press the **MENU** button to display special functions, followed by the **Green** button. Press the **Green** button again to expand the BOTTOM half. Press again to return to normal (FULL) size.



Reveal

Press the **MENU** button to display special functions, followed by the **Red** button to reveal hidden words e.g. quiz page answers. Press again to hide.



Red / Green / Yellow / Blue buttons

In TOP mode they correspond to the differently coloured subjects.
In List mode they correspond to the differently coloured page numbers.



List Store

In List mode the four page numbers can be altered (programme positions 1 - 25 only). To do this, press one of the four coloured buttons and enter the new page number. Press and hold the **OK** button, the page numbers will change to white indicating that the page is stored.

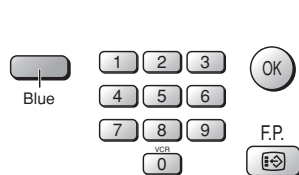


HOLD

To hold the Teletext page when viewing multi-page information. Press again to return to automatic page update.

Teletext operation

It is not possible to change the programme position when in News flash, Update or Sub Coded Page Access operation.



Favourite Page (F.P.)

Stores a favourite page in memory for instant recall. To store such a page, the TV must be in List mode, and the programme position must be from 1 - 25.

Press the **Blue** button, select the page number, then press and hold the **OK** button. The page number is now stored.

Press **F.P.** to recall this page.

Update Display

Press the **MENU** button to display special functions, followed by the **Yellow** button to view the TV picture whilst searching for a Teletext page (this is not necessary in **picture and text** mode, as the picture is displayed on the left of the screen). When found, the screen will display the page number at the top left. Press the **Yellow** button to view the page.

Press the **TV/TEXT** button again to return to normal TV operation.

News Flash

When a news flash page has been selected, press the **MENU**, **Yellow** buttons, to view the TV picture. When an update is received, the page number will be displayed on screen.

Press the **Yellow** button to display the News Flash.

Press the **TV/TEXT** button to return to normal TV operation.

Update

Press the **MENU**, **Yellow** buttons to see the update of information on certain pages.

When an update is received, the page number will be displayed at the top left of the screen.

Press the **Yellow** button to view the page.

Press the **TV/TEXT** button to return to normal TV operation.



Accessing sub pages

When Teletext information exceeds one page, it may take some time for the automatic changing of the sub pages to reach the sub page you require. As each sub page is found its number is displayed at the top of the page so that you may select it; as more sub pages are picked up, the display at the top of the page changes, so that you are always offered the most recently transmitted selection of sub pages.



In Teletext operation, use the following procedure to access sub pages:

If the sub page you want to look at is not yet available, press the **MENU** button (to display special functions) followed by the **Yellow** button to view the TV picture whilst waiting for more sub pages to be found. The sub pages found will be displayed across the top of the screen.

When the sub page you are waiting for is available press the **Yellow** button to return to viewing the Teletext pages, then use the left and right cursor buttons to select the sub page of your choice.

Notes:

- If you do not want to display the on screen selector keys on the TV picture whilst waiting for a sub page to be found, press the **MENU** button to clear the keys from the screen. Press again to redisplay the keys.
- If you have cleared the special function keys from the screen and then used the left and right cursor buttons to select a sub page, whilst still viewing the TV picture, you must press the **MENU** button then the **Yellow** button to display the Teletext page again.
- If the top of the page indicates that sub pages are being transmitted but the page displayed never changes, then the 'sub page number' is there to show the page contents have been updated, there are no sub pages.

Teletext operation



Alternatively, if you know which sub page you require, press the **MENU** button (to display special functions) followed by the **Blue** button; T**** will be displayed where the page number is normally found.

Enter desired sub page number before the T**** disappears.

e.g., to select page 6 enter 0, 0, 0 and 6.

Press the **Yellow** button to view the TV picture whilst waiting for more sub pages to be found. The sub pages found will be displayed across the top of the screen.

When the page is available, press the **Yellow** button to view the page. Regardless of how many pages are found, pressing the **Yellow** button will take you to the sub page which you requested.

Press the **TV/TEXT** button to return to normal TV operation.



INDEX

When in TOP operation

Press the **INDEX** button to return to the main index page.

Depending on the way information is transmitted, this may have to be pressed more than once to return to the main index page.

Connections

It is possible to connect a variety of additional equipment to this TV. The following pages detail how to connect external equipment to the front and rear of the TV.

Once your equipment is connected, use the following procedure to view the input:

Press the **TV/AV** button.

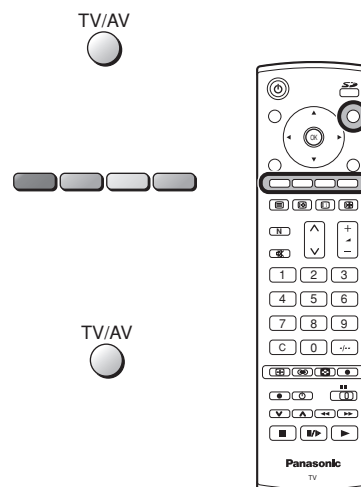
Whilst the on screen selector keys are displayed, press coloured buttons to select the AV source you wish to view.

- Red** button : AV1 Scart terminal
- Green** button : AV2 Scart terminal
- Yellow** button : AV3 Audio, Video, S-Video / PC terminals
- Blue** button : AV4 Scart, Component terminals

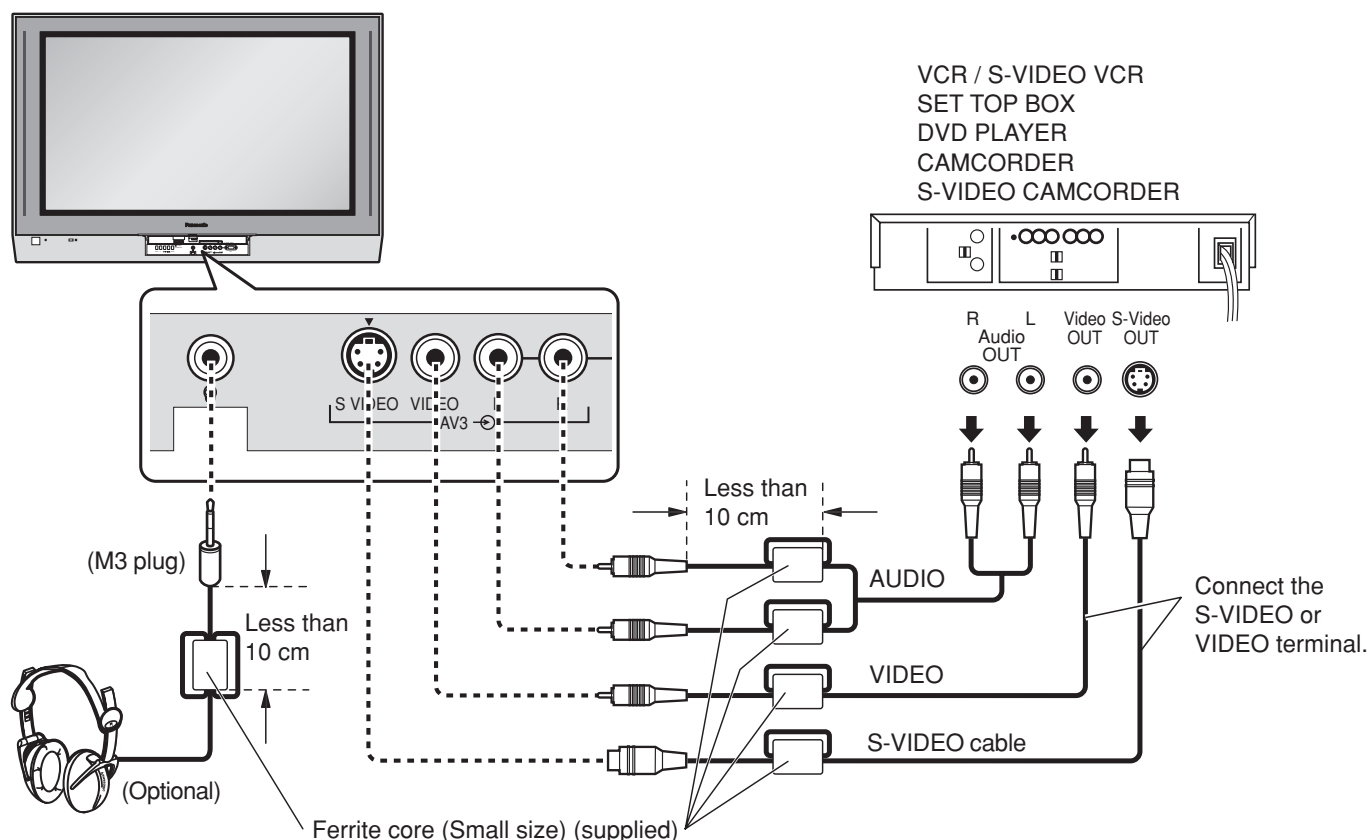
The on screen selector keys that appear clear after a few seconds. If you want to select an input when the keys are not shown, press the **TV/AV** button again and the keys will reappear.

Notes:

- You can also select an AV source using the **TV/AV** button on the front panel of the TV.
- Press the **TV/AV** button repeatedly until you reach the AV source you wish to view.
- When in **AV mode** a reduced number of options are available in the **Sound** and **Setup** menus (e.g., in the Setup menu there is no **Tuning menu** option).



How to connect the Headphones / AV3 terminals

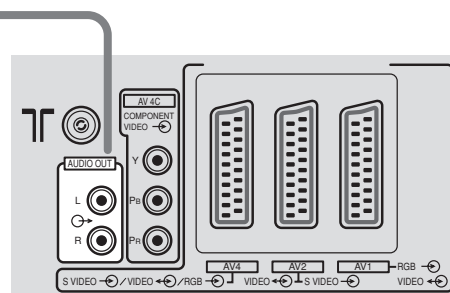
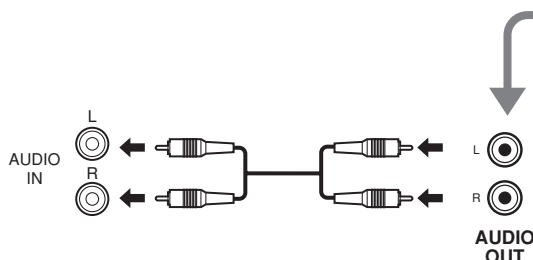
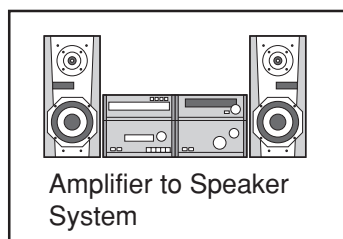


Notes:

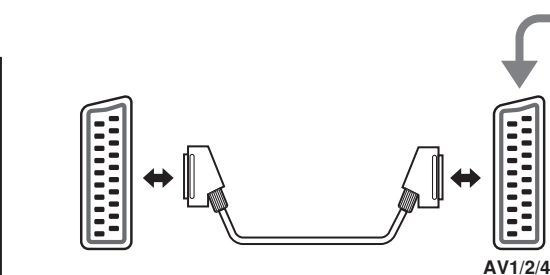
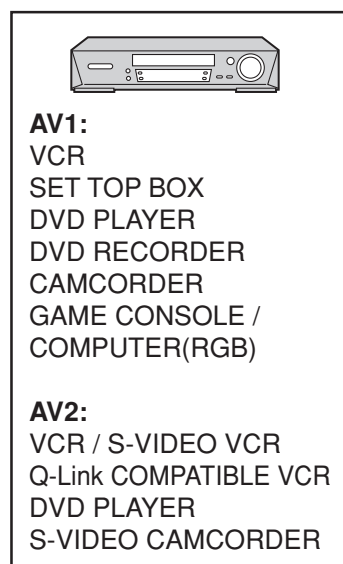
- The volume level of the headphones can be adjusted by selecting "Headphone volume" from the Sound menu.
- Additional equipment and cables shown are not supplied with this TV set.

Connections

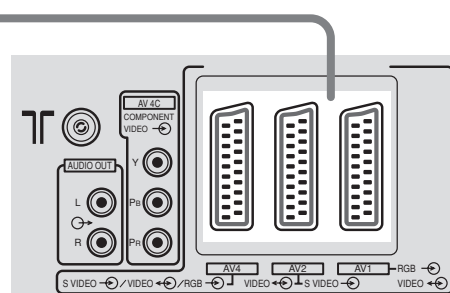
How to connect the Audio Output terminals



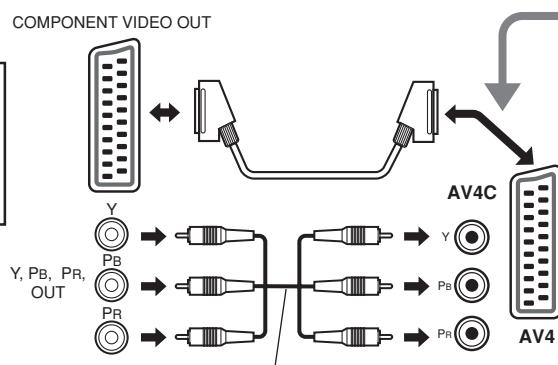
How to connect the AV1 / 2 / 4 Scart terminals



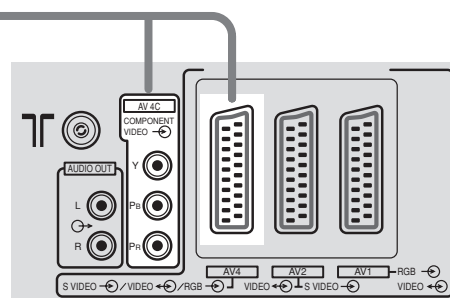
AV4:
Q-Link COMPATIBLE
DVD RECORDER
DVD PLAYER
SET TOP BOX
VCR / S-VIDEO VCR
S-VIDEO CAMCORDER



How to connect the Component Input terminals



This terminal accepts normal interlace format as well as progressive format.

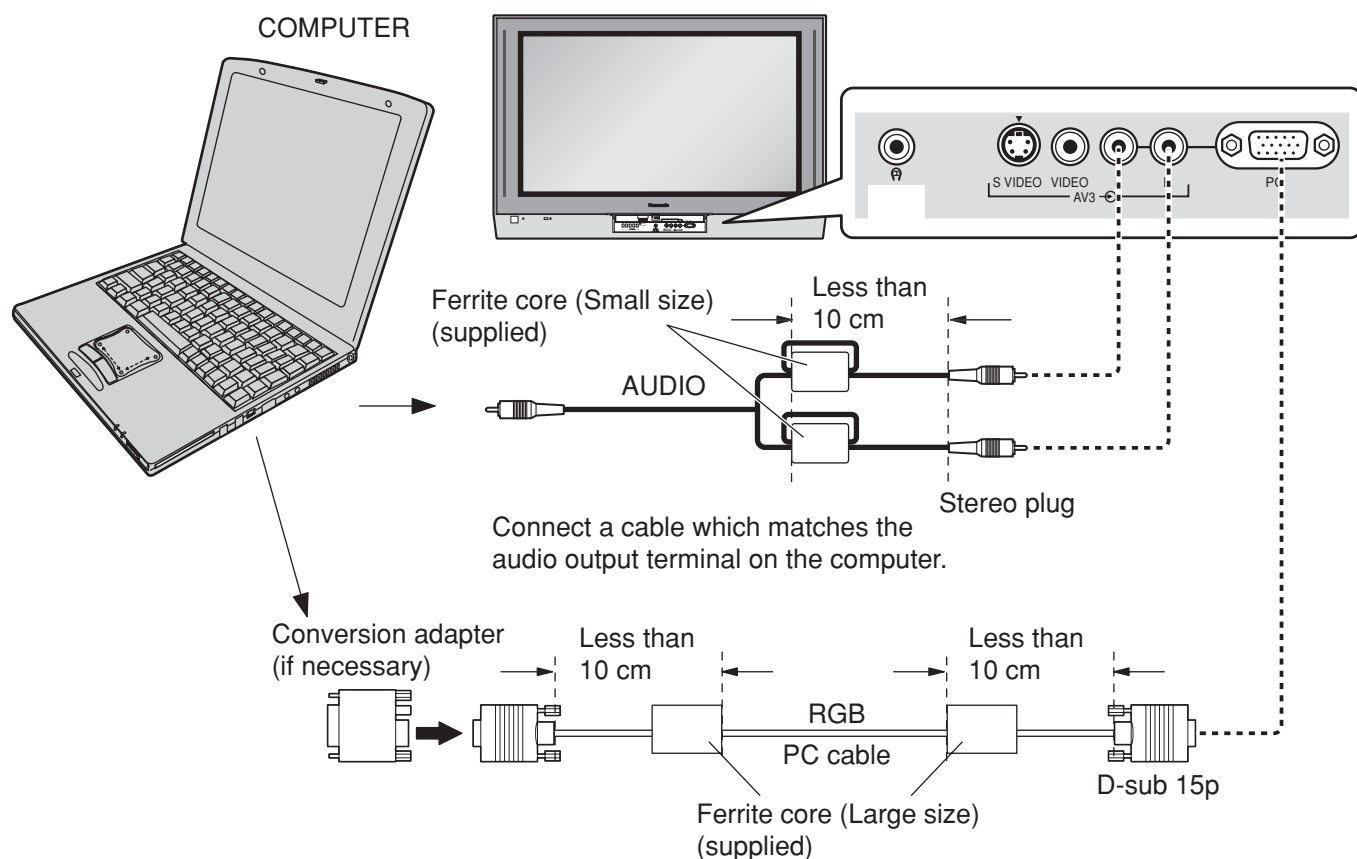


Notes:

- Additional equipment and cables shown are not supplied with this TV set.
- Do not connect a computer with TTL output (5V) to this set.
- For Scart terminal wiring information see page 40.
- When a Monaural VCR is used, connect the Monaural Audio cable to the Audio "L"(Left) terminal.

Connections

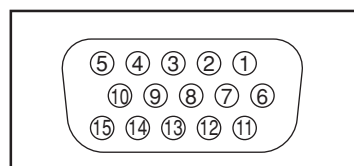
How to connect the PC Input terminals



Notes:

- Computer signals which can be input are those with a horizontal scanning frequency of 15 to 110 kHz and vertical scanning frequency of 48 to 120 Hz. (However, the image will not be displayed properly if the signals exceed 1,200 lines.)
- The display resolution is a maximum of 1,024 × 768 dots when the aspect mode is set to “4:3”, and 1,366 × 768 dots when the aspect mode is set to “16:9”. If the display resolution exceeds these maximums, it may not be possible to show fine detail with sufficient clarity.
- The PC input terminals are DDC1/2B-compatible. If the computer being connected is not DDC1/2B-compatible, you will need to make setting changes to the computer at the time of connection.
- Some PC models cannot be connected to the set.
- There is no need to use an adapter for computers with DOS/V compatible D-sub 15P terminal.
- The computer shown in the illustration is for example purposes only.
- Additional equipment and cables shown are not supplied with this set.
- Do not set the horizontal and vertical scanning frequencies for PC signals which are above or below the specified frequency range.
- Component Input is possible with the pin 1, 2, 3 of the D-sub 15P Connector.

Signal Names for D-sub 15P Connector

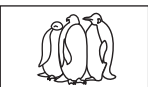


Pin Layout for PC Input Terminal

Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
①	R (P _R /C _R)	⑥	GND (Ground)	⑪	NC (not connected)
②	G (Y)	⑦	GND (Ground)	⑫	NC
③	B (P _B /C _B)	⑧	GND (Ground)	⑬	HD/SYNC
④	NC	⑨	NC (not connected)	⑭	VD
⑤	GND (Ground)	⑩	GND (Ground)	⑮	NC

Troubleshooting

If there is a problem with your TV please refer to the table below to determine the symptoms, then carry out the suggested check. If this does not solve the problem, please contact your local Panasonic dealer, quoting the model number and serial number (both found on the rear of the TV).

Symptoms		Checks
Picture	Sound	
 Snowy Picture	 Noisy Sound	Aerial location, direction or connection
 Multiple Images	 Normal Sound	Aerial location, direction or connection
 Interference	 Noisy Sound	Electrical appliances Cars / Motorcycles Fluorescent lights Switch on P-NR in Picture menu to reduce picture noise.
 Normal Picture	 No Sound	Volume level Sound mute switched on.
 No Picture	 No Sound	TV set to AV mode. Not plugged into AC outlet. Not switched on. Picture / Sound controls set at minimum levels. Check if in Standby mode.
 No Colour	 Normal Sound	Colour controls set at minimum levels.
 Poor or Distorted Picture	 Weak or No Sound	Retune Channel (s).
 Normal Picture	 Weak or Distorted Sound	Sound reception may have deteriorated. Switch MPX setting (Sound menu) to Off until reception improves.

Plasma TV panel

Symptoms	Check
Some parts of the screen do not light up.	The plasma TV panel is manufactured using an extremely high level of precision technology, however, sometimes some parts of the screen may be missing picture elements or have luminous spots. This is not a malfunction.
After-images appear 	Do not allow a still picture to be displayed for an extended period, as this can cause a permanent after-image to remain on the Plasma TV. Examples of still pictures include logos, video games, computer images, teletext and images displayed in 4:3 mode. Without signals and operations for 2 minutes, the level of the contrast decreases automatically to prevent image retention. Note: The permanent after-image on the Plasma TV resulting from fixed image use is not an operating defect and as such is not covered by the Warranty. This product is not designed to display fixed images for extended periods of time.

Sleep Feature

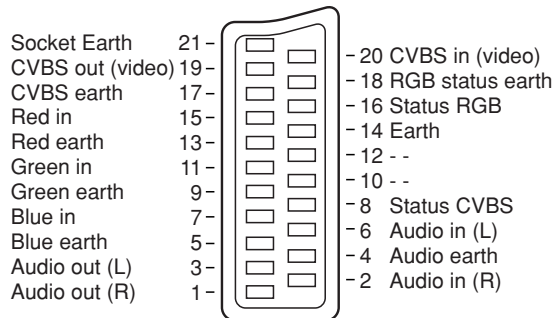
If the set is not switched off when the TV station stops transmitting, it will automatically go to standby mode after 30 minutes. This function will not operate when this TV is in AV mode.

Notes:

- External surfaces of the unit may become hot during operation. But this is completely normal.
- See label on the base of this equipment for ratings and other information.

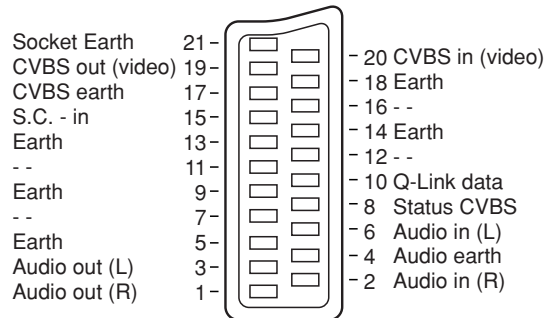
Scart and S-video terminal information

AV1 Scart terminal (RGB, VIDEO)



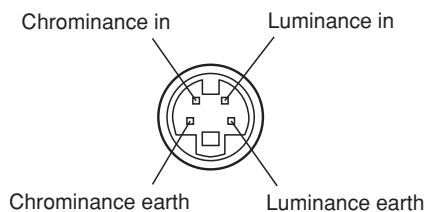
Suitable inputs for AV1 include RGB (Red / Green / Blue).

AV2 Scart terminal (VIDEO, S-VIDEO, Q-Link)

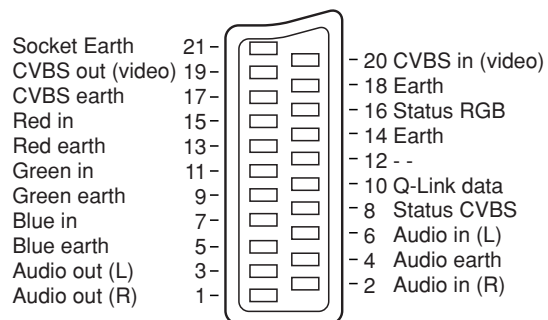


AV2 - Pins 15 and 20 are dependent on AV2 S-VHS / VIDEO switching.

AV3 S-VIDEO 4 pin terminal



AV4 Scart terminal (RGB, VIDEO, S-VIDEO, Q-Link)



AV4 - Pins 15 and 20 are dependent on AV4 S-VHS / VIDEO switching.

Input signal can be displayed

Applicable input signals for PC Input (D-sub 15P) (* Mark)

	Signal name	Horizontal frequency(kHz)	Vertical frequency(Hz)	PC
1	640 × 400 @70 Hz	31.47	70.00	*
2	640 × 480 @60 Hz	31.47	59.94	*
3	Macintosh13" (640 × 480)	35.00	66.67	*
4	640 × 480 @75 Hz	37.50	75.00	*
5	852 × 480 @60 Hz	31.50	60.00	*
6	800 × 600 @60 Hz	37.88	60.32	*
7	800 × 600 @75 Hz	46.88	75.00	*
8	800 × 600 @85 Hz	53.67	85.06	*
9	Macintosh16" (832 × 624)	49.73	74.55	*
10	1,024 × 768 @60 Hz	48.36	60.00	*
11	1,024 × 768 @70 Hz	56.48	70.07	*
12	1,024 × 768 @75 Hz	60.02	75.03	*
13	1,024 × 768 @85 Hz	68.68	85.00	*
14	Macintosh21" (1,152 × 870)	68.68	75.06	*
15	1,280 × 1,024 @60 Hz	63.98	60.02	*
16	1,280 × 1,024 @75 Hz	79.98	75.03	*
17	1,280 × 1,024 @85 Hz	91.15	85.02	*
18	1,600 × 1,200 @60 Hz	75.00	60.00	*

Note:

Signals other than above may not be displayed properly.

Specifications

TH-50PV30	
Power Source	220 V - 240 V 50 Hz / 60 Hz A.C.
Power Consumption	
Normal use	510 W
Standby	1.8 W
Power-OFF	1.0 W
Plasma Display panel	
Drive method	AC type
Aspect Ratio	16:9
Contrast Ratio	3000:1
Screen size (No.of pixels)	50-inch 1,106 mm (W) × 622 mm (H) × 1,269 mm (diagonal) 1,049,088 (1,366 (W) × 768 (H)) [4,098 × 768 dots]
Sound	
Speaker	Woofer ϕ 80 mm × 2, Tweeter 16 mm × 73 mm × 8
Audio Output	26 W [8 W + 8 W, 5 W + 5 W] (10 % THD)
Headphone	M3 (3.5 mm) Jack × 1
Applicable signals	
Colour System	NTSC, PAL, PAL60, SECAM, Modified NTSC
Scanning format	525 (480) / 60i · 60p, 625 (575) / 50i · 50p
PC signals	XGA display VGA, SVGA, XGA SXGA, UXGA (compressed) Horizontal scanning frequency 15 - 110 kHz Vertical scanning frequency 48 - 120 Hz
Receiving Systems/ Band name	PAL B, G, H, I, SECAM B, G SECAM L / L' VHF E2 - E12 VHF H1 - H2 (ITALY) VHF A - H (ITALY) UHF E21 - E69 CATV (S01 - S05) CATV S1 - S10 (M1 - M10) CATV S11 - S20 (U1 - U10) CATV S21 - S41 (Hyperband) PAL D, K, SECAM D, K VHF R1 - R2 VHF R3 - R5 VHF R6 - R12 UHF E21 - E69 PAL 525/60 Playback of NTSC tape from some PAL video recorders (VCR) M.NTSC Playback from M.NTSC Videorecorders (VCR) NTSC (AV INPUT ONLY) Playback from NTSC Videorecorders (VCR)
OUTPUT	
AUDIO OUT	AUDIO L-R (RCA Pin Type × 2) 0.5 Vrms
INPUT	
AV3-Front	VIDEO (RCA Pin Type × 2) 1.0 Vp-p (75 Ω) S-VIDEO (MINI DIN 4-pin) Y:1.0 Vp-p (75 Ω) C:0.286 Vp-p (75 Ω) AUDIO L-R (RCA Pin Type × 2) 0.5 Vrms
AV4C-Rear	Y 1.0 Vp-p (including synchronization) PB/PR $\pm$ 0.35 Vp-p
PC	(HIGH-DENSITY D-SUB 15PIN) R,G,B/0.7 Vp-p (75 Ω) HD, VD/1.0 - 5.0 Vp-p (high impedance)
Others	SD Card slot × 1, PC Card slot × 1
INPUT/OUTPUT	
AV1-Rear	21 Pin terminal (Audio/Video in, TV out, RGB in)
AV2-Rear	21 Pin terminal (Audio/Video in, Audio/Video out, S-Video in, Q-Link)
AV4-Rear	21 Pin terminal (Audio/Video in, Audio/Video out, S-Video in, RGB in, Q-Link)
ANT-Rear	UHF / VHF
Operating Conditions	Temperature : 0 ° - 40 °C Humidity : 20 % - 80 % RH (non-condensing)
Accessories Supplied	
Remote Control Transmitter	EUR7635020
Batteries	2 × R6 Size
Clamper	TMME206 × 2
Ferrite core	Large size × 2, Small size × 5
Dimensions (W × H × D)	1,329 mm × 870 mm × 139 mm
Mass (Weight)	55.0 kg

Notes:

- Design and specifications are subject to change without notice. Mass and dimensions shown are approximate.
- This equipment complies with the EMC standards listed below.
EN55013, EN61000-3-2, EN61000-3-3, EN55020.

Customer' Record

The model number and serial number of this product can be found on its rear panel. You should note this serial number in the space provided below and retain this book, plus your purchase receipt, as a permanent record of your purchase to aid in identification in the event of theft or loss, and for Warranty Service purposes.

Model Number _____

Serial Number _____

Matsushita Electric Industrial Co., Ltd.

Web Site : <http://www.panasonic.co.jp/global/>

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